

Retiree Stock Allocation Recommendations: Do You Fit the "Mold"?

By William Reichenstein

How much of your portfolio should be invested in stocks if you are a retiree living off of your retirement savings?

The answer depends on how closely you fit the typical "mold."

At first blush, there would appear to be a fair amount of disagreement among the "experts" on this seemingly basic question. But upon closer examination, it is clear that many of these disagreements stem from differing assumptions about the typical retiree.

In this article, we'll take a look at the basic disagreements that exist among professionals. A better understanding of the assumptions that underlie their models—and how those assumptions affect the recommendations—can help you determine which "mold" comes closest to fitting your own situation.

The Experts: Life Cycle Portfolios

One of the best views of how professionals view the asset allocation issue for typical retirees comes from the various life cycle funds. These are actual retirement portfolios designed by major mutual fund families for "typical" investors with various target retirement dates.

For example, Fidelity Investments, T. Rowe Price Associates, and Wells Fargo Investments have life cycle funds for investors with retirement dates of 2040, 2030, 2020, 2010, as well as funds for current retirees.

The Vanguard Group has funds for investors with target retirement dates of 2045, 2035, 2025, 2015, 2005, and one for current retirees.

How do these fund families allocate assets for their current retiree portfolios?

[Table 1](#) presents the mutual fund families' recommended asset allocations for their life cycle funds that are intended for current retirees.

You can see from the table that there are substantial disagreements about the recommended asset allocation for "typical" retirees' financial portfolios.

The primary disagreements include:

- The appropriate stock allocation,
- The merits of international diversification, and
- The merits of cash.

The primary focus here is the stock allocation issue, but the [two accompanying short articles](#) provide some basic guidelines concerning international and cash allocations.

TABLE 1. Recommended Asset Allocation for Retirees

Asset Categories	Fidelity Income Fund* (%)	Vanguard Ret. Income Fund (%)	T. Rowe Price Ret. Income Fund** (%)	Wells Fargo Today Funds*** (%)
Stocks	20	20	40	35
Bonds	40	75	30 to 60	63
Cash	40	5	0 to 30	2
International+	0	0	15	24

* The Fidelity Funds reach the Income Fund's allocation five to 10 years after the target date. This may partially explain its conservative stock allocation.

** In its Retirement Income Fund, T. Rowe Price allocates 0% to 30% of the Retirement Income Fund to short-term bonds and 0% to 30% to cash for a total of 30%, but it usually holds short-term bonds. So, except for unusual circumstances, it holds no cash.

*** Wells Fargo's life cycle funds incorporate tactical asset allocation—that is, they allow the asset allocation to vary with perceived market prospects, but Wells Fargo said they expect to normally invest “about 35%” in stocks.

+ The international figures denote the percent of the stock portfolio invested internationally.

Strategic Stock Exposure

The recommended stock allocations tend to follow two distinct patterns: two of the fund families recommend a 20% stock allocation, while the other two recommend more on the order of a 35% to 40% commitment.

Why the differences?

The recommendations for a 20% stock allocation most likely come from evidence from historical returns indicating that portfolios containing these stock exposures have a risk that is no higher than an all-bond portfolio, a risk level that is appropriate for a shorter-term time horizon.

The higher recommended stock allocations most likely are based on studies concerning withdrawal rates during retirement.

For example, one recent study found that, for individuals withdrawing funds each year from their portfolio, the probability of not outliving retirement resources was maximized when initial withdrawal rates were kept below 5% (with subsequent withdrawals increasing with inflation). For a 4.5% initial withdrawal rate, the probability was maximized with portfolios consisting of 40% stocks and 60% fixed income (including both bonds and cash) over a 30-year time horizon, while for a 4% initial withdrawal rate, the probability is maximized with an allocation of 30% stocks and 70% fixed income. [For a complete description of this study,

see "Bear Market Strategies: Watch the Spending, Hold the Stocks," a study by T. Rowe Price, in the May 2003 *AAIL Journal*].

So, who should you believe—the 20% crowd or the 35% to 40% crowd?

The answer in large part depends upon the implicit assumptions. For example, for T. Rowe Price, the "typical" retiree:

- Is newly retired individual (with a long retirement horizon),
- Will receive retirement revenue only from Social Security and the financial portfolio, and
- Intends to use all resources for their retirement needs. Let's look at how some of these assumptions affect the allocation equation.

Retirement Horizon

Since stocks are riskier than bonds, long-run stock returns have exceeded long-run bond returns and they will likely continue to do so.

Numerous studies indicate that, to reduce the probability of exhausting the portfolio over a long retirement, a retiree needs a healthy exposure to stocks. If a retiree has a reasonable probability of living 20 years or longer—the retiree is in decent health and is age 75 or younger—then he needs a reasonable stock exposure of 35% to 40%.

Retirees with shorter horizons—those in poor health or at least 80—may prefer more conservative portfolios, with stock exposures of about 20% to 25%.

The key point is that the recommended stock allocation for the financial portfolio varies by age. As someone progresses from early retirement to later retirement, the stock allocation should decline.

The Expanded Portfolio

Another important assumption concerns other available retirement income sources. Here, the concept of the expanded portfolio is helpful.

There is an inconsistency in the financial profession when dealing with retirement preparedness. When considering whether someone is prepared for retirement, the profession routinely considers revenue from all sources, which may include Social Security, defined-benefit plans, personal savings, and other sources. However, when asked to calculate a retiree's current asset mix, the profession considers only the financial asset—that is, the personal savings.

Since revenue to meet retirement needs comes from multiple sources, investors should evaluate their allocation based on their expanded portfolio that includes the value of all revenue-producing assets.

The primary advantage of this approach is that it puts stock exposure into perspective—for many individuals who will receive Social Security and other guaranteed fixed payment streams, their real exposure to the stock market is much lower than it would appear if only financial assets were taken into consideration.

Resources for Others

Some retirees are in the envious position of having investment portfolios that will easily fund their retirement income needs—and then some. For assets over and above retirement income needs, the investment horizon becomes much longer term—essentially the horizon of the beneficiary. In these instances, the stock allocation should be higher for the portion of the financial portfolio that is intended for younger individuals or institutions, such as charities, that have a longer investment horizon.

"Typical" Variations

Based on the withdrawal rate studies, I recommend a strategic stock allocation of 35% to 40% for "typical" relatively young and healthy retirees—i.e., those age 75 or younger who might live another 20 years—and who plan to use all resources for their retirement needs.

What if you don't fit this mold?

Let's take a look at a "typical" retiree's allocation, and then in a series of cases change the assumptions to see how this should affect:

1. The recommended stock allocation of the financial portfolio, and
2. The revenue pattern during retirement.

In the process, you'll gain some important insights into how you should evaluate your own personal situation. To keep the analysis tractable, I will ignore taxes.

Case 1: The "Typical" Retiree

Tina is a 66-year-old single "typical" retiree, by which I mean she will rely on revenue from two sources—Social Security and her financial portfolio—to meet her retirement needs. Like a growing majority of workers, she is not covered by a defined-benefit plan—one that pays a fixed amount monthly for the rest of her life. She views all resources as intended for her retirement needs; if she should die relatively young, her niece or a charity will receive the remaining funds, but the resources are being managed for her retirement needs.

Tina plans to withdraw 4% of her financial portfolio the first year. She also plans to maintain about a 40% stock exposure.

Table 2 presents Tina's financial portfolio and her extended portfolio. Her financial portfolio contains \$725,000 in financial assets, with 40%, or \$290,000, in stocks and 60% in bonds. Social Security is part of her extended portfolio. It currently pays her \$1,500 a month, or \$18,000 a year. Assuming average life expectancy, the present value of projected Social Security benefits is about \$275,000.

Her extended portfolio, which includes the financial portfolio and Social Security, is worth about \$1 million.

Tina's goal is to use all available resources to provide the highest constant annual revenue with reasonable assurance of not exhausting resources during her lifetime. She will withdraw 4% of the financial portfolio the first year and an inflation-adjusted equal amount each year thereafter. Her projected revenue is \$47,000 a year, which consists of \$18,000 from Social Security and \$29,000 from her financial portfolio.

Her real revenue will remain constant in subsequent years since revenue from both Social Security and the financial portfolio will increase with inflation.

TABLE 2. Financial and Expanded Portfolios

	Financial Assets \$	Present Value of		Expanded Portfolio \$	Stock Allocation		
		Social Security \$	Other \$			Fin'l Assets %	Expand Port %
Typical Retiree (New retired)	725,000	275,000	0	1 million	290,000	40	29
Case 2: Older Retiree	725,000	155,000	0	880,000	181,250	25	21
Case 3: Wealthy Retiree	3,725,000	275,000	0	4 million	2.29 million	61	57
Case 4: Immediate Annuity	525,000	275,000	200,000	1 million	290,000	55	29
Case 5: Defined-Benefit Plan	525,000	275,000	200,000	1 million	290,000	5	29
Case 6: Certain Cash Flows	725,000	275,000	1.2 million	2.2 million	725,000	100	33
Case 7: Uncertain Cash Flows	725,000	275,000	?	1 million	254,000	35	25
Case 8: Working Retiree	725,000	275,000	0	1 million	290,000	40	29

Case 2: The Older Retiree

This case is similar to the "typical" retiree except that Tina is older, at age 80. Her financial portfolio contains \$725,000 in financial assets and she gets \$18,000 a year from Social Security.

Do a 4% first-year withdrawal rate and 40% stock exposure apply to her?

The 4% withdrawal rate is too conservative for an 80-year-old with a much shorter time horizon. She can comfortably withdraw a larger portion of her portfolio, perhaps as high as 6%. The shorter time horizon also suggests that the 40% stock allocation for the financial portfolio is too high for a typical 80 year old.

Case 3: The Wealthy Retiree

This case assumes that Tina has more wealth than she needs to satisfy her retirement needs—her extended portfolio contains \$3,725,000 in financial assets, as well as Social Security.

Let's assume that she plans to spend \$1,725,000 for her lifetime needs and leave remaining funds at her death to a niece or endowment. She plans to spend \$87,000 a year, \$18,000 from Social Security plus \$69,000 or 4% of \$1,725,000 from the portion of the financial portfolio intended for her lifetime.

Of course, if disaster strikes, she can use the other funds, but the expectation is that the niece or endowment will receive some \$2 million.

Since the niece and endowment have much longer investment horizons than Tina, the desired stock exposure for that \$2 million could easily be set at 80%. The overall stock exposure for the financial portfolio is set at 61%, 40% of \$1,725,000 plus 80% of \$2 million.

Case 4: Annuitization

One approach to dealing with the concern many retirees have of outliving their retirement resources is to buy an immediate annuity. I discussed this approach in my November 2003 column ["Allocation During Retirement: Adding Annuities to the Mix"].

The ideal candidate for annuitizing part of their portfolio is someone who is single, with at least an average life expectancy, who has no strong bequest motive, and who has no one to support them if they run short of resources.

Let's assume Tina fits this mold and decides to annuitize part of her financial portfolio. She uses \$200,000 from the bond portion of her financial portfolio to buy an immediate fixed annuity that will pay her \$1,150 a month (\$13,800 a year) for the rest of her life.

This simple life annuity has no minimum guarantee period, so there are no payments after her death.

Table 2 presents the asset allocation of her financial portfolio and extended portfolio. The financial portfolio contains \$525,000 but still has \$290,000 in stocks for a 55% stock exposure. The annuity is worth \$200,000 in the extended portfolio. The extended portfolio is still worth \$1 million and it still has the same 29% stock exposure as before the purchase of the fixed immediate annuity. According to the extended portfolio, she is in a similar financial position before and after the purchase of the immediate annuity. You can see here that the extended portfolio provides a more accurate portrayal of her true financial position.

The revenue pattern here differs from the pattern in Case 1 of the typical retiree. In Case 1, Tina received \$47,000 in revenue the first year and an inflation-adjusted equivalent amount each year thereafter. In contrast, Case 4 does not provide a constant real revenue stream for the rest of her life. If she withdraws 4% of the financial portfolio in the first year, then Tina would receive \$52,800 the first year: \$21,000 from the financial portfolio, \$18,000 from Social Security, and \$13,800 from the annuity. But the real amount would decrease in subsequent years since the Social Security benefits and withdrawal from the financial portfolio would increase with inflation, but the fixed annuity payment would not.

To counter this tendency, Tina should either save \$5,800 of the first year withdrawal or withdraw only 2.9% of her financial portfolio the first year. Furthermore, she should continue to either save part of each year's withdrawal or withdraw less than 4% for several years.

In short, to provide the constant real annual revenue that she desires, Tina cannot withdraw 4% of the financial portfolio and consume all revenue. Rather, for the first several years, she will either have to save some of the revenue or withdraw less than 4% from the financial portfolio.

Case 5: A Defined-Benefit Plan

Suppose Tina retired from a company that has a defined-benefit plan that will pay her \$1,150 a month (\$13,800 a year) for the rest of her life. In addition, she is eligible for Social Security benefits and has a financial portfolio worth \$525,000 including \$290,000 in stocks. Table 2 presents this case, which is conceptually equivalent to Case 4. Since an annuity that pays her \$1,150 a month for the rest of her life should be included in the extended portfolio, the defined-benefit plan should be included, too. The cash-flow and investment implications of Case 5 are also the same as for Case 4.

Case 6: Certain Cash Flows

Let's return to Case 1 except let's assume that Tina will also receive an annual payment of \$150,000 a year for 10 years from a winning lottery ticket. This asset is not part of the traditional financial portfolio, but it will clearly impact her level of annual spending—and it should impact the allocation of her financial portfolio. This certain fixed-dollar revenue stream is like a big bond in her portfolio.

Table 2 presents her financial and extended portfolios. Her extended portfolio is worth about \$2,200,000 and includes the present value of the lottery winnings, which is about \$1,200,000. This large "bond" held outside her financial portfolio should affect the allocation of the financial portfolio. In this case, she allocates her entire financial portfolio to stocks. This raises the stock exposure for the combined values of the lottery and financial portfolio to 38%, which is close to the original recommendation for the financial portfolio of our typical Case 1 retiree.

The lottery ticket also affects her cash flow pattern. As before, Tina's goal is to spend a constant real amount each year for the rest of her life. She should spend the \$18,000 of Social Security plus 4% of the \$1,925,000 combined values of lottery and financial portfolio, or \$95,000, the first year. Since the lottery pays more than this amount, to reach her lifetime goal she should not only withdraw no funds from the financial portfolio, but she should also save much of the \$150,000 check.

Case 7: Uncertain Cash Flows

This case is similar to Case 6, except the annual income from the non-financial asset is uncertain. Assume Tina receives an annual income from natural gas wells. This income varies with natural gas prices. It is currently at its highest level of \$30,000 a year, but it has varied in recent years from \$9,000 to \$30,000. Furthermore, although the wells have an expected remaining life of 10 years, the actual remaining life could be much shorter or longer. In short, the size and length of cash flows from this asset are highly uncertain.

This asset clearly belongs in the extended portfolio. It should affect Tina's annual spending amount. As before, Tina's goal is to consume a constant real amount each year for the rest of her life. Since the value of future gas revenues is unknown, it is not possible for Tina to determine precisely how much of each year's revenue she should consume and how much she should save. I recommend a conservative approach for two reasons:

- First, during good times (like today with the record high payment), it is easy to be over-optimistic.
- Second, it is easier to adjust to higher spending levels than lower spending levels.

One thing is certain: She should save most of today's record-high payment. If she does not, then her real income will fall if gas prices decline, and will fall even farther when the wells dry up.

In addition, this risky asset could affect the asset allocation of her traditional financial portfolio. The returns on the gas wells are likely to be weakly correlated with both stock and bond returns. Nevertheless, since the cash flows from the gas wells are so uncertain, she should probably decrease the risk of her financial portfolio. Instead of holding 40% of financial assets in stocks, she decides to reduce the stock exposure to 35%.

Case 8: Working Retiree

For this last example, let's go back to Case 1 but assume Tina has a consulting contract with her prior firm that will pay her a real income of about \$10,000 a year for the first three years of retirement. If she withdraws 4% of the financial portfolio, she would have a real revenue of \$57,000 in each of the first three years (\$18,000 from Social Security, \$29,000 from the financial portfolio, plus \$10,000 of income), and \$47,000 a year thereafter.

Her financial portfolio and extended portfolio are the same as in Case 1. In particular, she should not include the value of future earned income as part of her current extended portfolio, because she has not yet earned it. She has a financial portfolio worth \$725,000, including \$290,000 in stocks, and an extended portfolio worth about \$1 million.

Since she wants to spend a constant real amount each year for the rest of her life, the projected earned income should affect her spending pattern: She should save most of the earned income each year.

In Case 1, where there was no projected income, she could spend \$47,000 a year—the \$18,000 from Social Security plus \$29,000 from the financial portfolio. To achieve her goal here, she should spread the projected earned income over her projected life, which means she should only spend perhaps \$49,000 a year, or \$2,000 a year more. During her first three retirement years, she should reduce withdrawals from the financial portfolio by most of the value of the earned income.

The investment implication is that retirees who want to spend a constant real amount each year and plan to earn income in their early retirement years should allocate their projected earnings over their projected lifetime. This means that they should either save most of the aftertax value of the earnings or reduce the withdrawal rate from their retirement portfolio.

Summary

There appears to be fairly substantial disagreements among "the experts" about the proper stock asset allocation for retirees. There is also some disagreement concerning the merits of international stock diversification, and the merits of cash.

However, much of the disagreement about the proper stock allocation appears to stem from different assumptions about the "typical" retiree's circumstances. The expert opinions seem consistent with my recommendation of a strategic stock allocation of 35% to 40% for "typical" relatively young and healthy retirees—i.e., those age 75 or younger who might live another 20 years—who plan to use all resources for their retirement needs.

But that recommendation needs to be adjusted if you don't fit the "typical mold." In particular, you need to examine the recommendation in light of:

- Your own investment horizon,
- Your extended portfolio, and
- Whether all resources are needed for your retirement income.

Most importantly, keep in mind that revenue to meet retirement needs comes from multiple sources. I encourage individuals to think about and manage their extended portfolio, which contains all assets expected to produce revenue, to help fund their retirement.

Should You Venture Abroad? The Merits of International Stock Diversification for Retirees

What do "the experts" think about international diversification?

Although not shown, in their life cycle funds T. Rowe Price and Wells Fargo advise investors of all ages to maintain a constant international stock exposure. T. Rowe Price recommends that investors place about 15% of the stock portfolio in international stocks, while Wells Fargo recommends 24%.

Vanguard recommends a constant 20% allocation for investors with retirement dates from 2015 to 2045. But Vanguard recommends no international exposure for investors with retirement dates of 2005 and for those who are already retired.

Fidelity recommends that international stocks represent 17% of the stock portfolio for investors with retirement dates of 2040, but this amount decreases as the investor approaches retirement and it is zero for retirees.

What should you do?

To try to answer this question, I looked at some of the studies that have been done concerning international diversification. Of course, studies like these are always based on prior returns, and there is no guarantee that the past is a prologue to the future. However, from my experience it is usually best to assume that past relationships will hold. Past studies conclude that international stock diversification reduces the volatility (as measured by standard deviation) of one-year returns.

Based on this evidence, I encourage investors, even those with short horizons, to always maintain a strategic allocation to international stocks. Thus, the strategic recommendations of T. Rowe Price and Wells Fargo appear most consistent with the empirical evidence. However, retirees' international exposure should consist mostly or entirely of developed markets stocks; emerging market can be avoided. A reasonable approach would be to put about 20% of a stock portfolio in international stocks. This advice applies to investors of all ages.

The Merits of Cash: Not Worth Its Weight

How much "cash"—very short-term debt—should retirees hold? The Table 1 recommendations do not agree on the merits of cash (as opposed to short-term bonds) in retiree portfolios.

Cash is necessary for short-term liquidity needs, but it is also used to temper the volatility of a portfolio that contains higher-returning but riskier assets such as stocks. However, short-term bonds can also be used for this latter purpose.

Wells Fargo and Vanguard recommend no more than a 5% cash exposure for their retirement portfolio. T. Rowe Price recommends a 30% combined exposure to short-term bond funds and cash. But, based on conversations with T. Rowe Price personnel, its retirement fund usually will hold short-term bonds and no cash. Fidelity is the only family to recommend a larger than 5% permanent cash exposure for the retiree fund, and it recommends a 40% cash exposure. The T. Rowe Price study discussed earlier also concludes that retirees should keep relatively little in cash.

These low allocations to cash reflect prior research that suggests returns on the very short-term debt securities held by money market funds tend to be especially low. By regulation, the average maturity of a money fund cannot exceed 90 days, and most have maturities closer to 45 days. Prior research also suggests that returns on one-year to two-year bonds almost always exceed returns available on money market funds. Unless investors need the check-writing privileges available on most money funds, they should move assets from money funds to short-term bond funds. Although the additional annual return from this strategy will likely be small (e.g., 1%), this strategy is attractive from a returns-to-risk perspective since the additional risk appears negligible.

Finally, the advice to keep cash assets to a minimum applies to investors of all ages. From my experience, many investors—myself included—have been guilty of keeping more funds than necessary in cash.

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