

# INVESTING FOR INCOME IN A LOW INTEREST RATE ENVIRONMENT

By Robert D. Siefert

Gone are the days when a retiree could receive a comfortable income with investments no more esoteric than bank CDs. The dilemma today is: How do you invest for a desired rate of return in excess of that which is attainable from interest and dividends?

Up until the late 1980s, the conventional wisdom for obtaining a steady stream of income from a pool of savings was to simply find a fixed-income product returning a high rate of interest and then proceed to rest comfortably each night. Of course, interest rates at that time were at an all-time high for an extended period. Two decades ago, many a retiree envisioned a comfortable lifestyle with investments no more esoteric than bank CDs.

Times have changed. Use of your savings as a lifestyle supplement requires either a modification of expectations or a change in investment strategy.

This article discusses issues that need to be considered in developing a portfolio to meet the income needs of a typical couple who are just entering retirement.

## THE INCOME INVESTOR

The "typical" couple we will use as an example has an accumulated savings of \$300,000, and the husband is one month away from retirement. A telecommunications specialist, he was entitled to a \$23,000 pension from a previous employer and \$17,000 from Social Security; the wife never worked outside the home. The couple believes that they would need a sustained income of about \$55,000 in today's dollars in order to sustain their desired lifestyle. Since \$40,000 of that can be supplied by pension payments and Social Security, they want the remaining \$15,000 of income to be derived from their savings.

The generation of \$15,000 appears to require a very modest return—a mere 5% of \$300,000. However the retiring couple correctly recognizes the need to maintain pace with inflation. Protecting against a 3% inflation factor during their retirement years increases their required rate of return to slightly more than 8% annually:

$$[(1 + \text{Pre-Adjusted Return}) \times (1 + \text{Inflation})] - 1 \times 100 = \text{Required Return}$$

$$[(1.05 \times 1.03)] - 1 \times 100 = \text{Required Return}$$

$$8.15\% = \text{Required Return}$$

The couple's goal is to draw from a pool of assets while leaving the assets intact; their primary concern is running out of money during their lifetimes. But this introduces a common dilemma in today's low interest rate environment, namely, how do they invest for a desired rate of return in excess of that which is attainable from interest and dividends?

## THE INTEREST RATE REALITY

A recent look at the Treasury yield curve as of the end of 1998 paints a

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contrasting picture to the period 20 years ago:

|           | Current |
|-----------|---------|
| Maturity  | Yield   |
| Two-year  | 4.5%    |
| Five-year | 4.5%    |
| 30-year   | 5.1%    |

These yields are comparable to current bank CD rates. High-quality corporate bonds will provide an additional risk premium of  $\frac{1}{2}\%$  to  $\frac{3}{4}\%$ . GNMA securities will yield in the  $6\frac{1}{2}\%$  range with accompanying liquidity risk. Certain REITs and high-yield bonds may offer an 8% yield or better, but neither asset class alone provides a requisite element of principal safety.

The reality of investing for income in a low interest rate environment introduces additional risk elements as compared to the high interest environment of the past. Unless the couple modifies their original objectives, they must consider the following:

- Investments will include alternatives outside of fixed-income securities;
- The principal value will inevitably fluctuate over time; and
- The required annual income must be drawn from both dividend distributions and the redemption of growth-oriented securities.

## ASSESSING YOUR RISK

Many investment professionals use sophisticated allocation software to design portfolios that may be expected to achieve the target return objective with a minimal amount of portfolio volatility. However, individuals can come to comparably effective results using simple common sense and a few good investment rules of thumb. That's the approach used in this example.

The first step is to establish reasonable expectations concerning the returns of various assets.

Although the stock market has enjoyed wonderful recent perfor-

mance, a longer term perspective suggests that the average annual return of equities ranges closer to 10% to 12%, depending on the size of the company and its primary business operations (domestic or international). These are more realistic expected returns for equities. While historical taxable fixed-income performance has generally been between 7% and 8%, the current interest rate environment must be considered as a depressant on total fixed-income returns in the immediate future. A reasonable expected return of 6% may be appropriate for fixed-income securities.

Knowing that preservation of principal is critical to the retirees, they might consider an allocation of no more than 50% to stocks. A proportion of equities less than this amount may not achieve the desired 8% return, while greater than 50% stocks may introduce elements of volatility and risk unacceptable to a corollary objective of principal preservation.

With the starting point of a target equity percentage, the couple can continue to think about elements of a portfolio that are conducive to the stated income objectives:

- Emphasize equity investments with higher dividend yields, since at least some return stream can be obtained even in a declining market. In general, value stocks tend to have higher dividend yields than growth stocks.
- Diversify among different market capitalizations and among U.S. and international stocks. However, since small stocks and international stocks have more volatility, exposure to these assets should be limited.
- Carefully diversify among varying kinds of fixed-income assets, emphasizing investment-grade securities such as U.S. Treasuries, government-backed mortgages and high-quality corporate debt, and limiting exposure to high-yield and foreign bonds.

- Avoid the use of long-term bonds to limit interest rate risk. Interest rate risk occurs because bond prices move inversely with interest rates; when rates move up, bond prices drop, and when rates move down, bond prices rise. For bonds with similar credit qualities, the longer the maturity, the greater the bond price volatility when rates change. Since interest rates right now are near their historical lows, you may wish to limit the amount of risk associated with rising rates.

- Maintain a requisite amount of cash to provide some cushion against a loss in portfolio value.

These simple elements can be used to create a valid income portfolio, such as the following:

|                                     |            |
|-------------------------------------|------------|
| <b>Cash</b>                         | 5%         |
| <b>Bonds</b>                        |            |
| US Treasury Intermediate Bonds      | 15%        |
| GNMA Bonds                          | 10%        |
| High-Quality Corporate Intermediate | 10%        |
| High-Yield Bonds                    | 5%         |
| International Bonds                 | 5%         |
|                                     | <b>45%</b> |
| <b>Stocks</b>                       |            |
| Large-Cap Value                     | 15%        |
| Mid-Cap Value                       | 15%        |
| Small Company                       | 10%        |
| International Stocks                | 10%        |
|                                     | <b>50%</b> |

Of course, before moving further you must be sure that you are comfortable with this allocation. For many, the reality that principal is at risk even in a relatively conservative portfolio is a hurdle too big to overcome. However, if you lower the portfolio's risk further to reduce principal fluctuations, you must make a corresponding reduction in the income expectations placed upon the portfolio. In other words, do not expect to generate the equivalent of an 8% return by confining the investments to bank deposits and a Treasury Direct account.

## TESTING THE ALLOCATION

Assuming comfort with the asset allocation, the couple can test out how such a hypothetical portfolio would have performed over a recent time frame by using specific funds.

One of the more powerful software packages that individual investors can use to test historical performance in situations such as this is Morningstar's Principia. Individuals can create "what if" scenarios and see how a particular allocation would have performed in the past if invested according to specific guidelines.

In this example, I used the version called Principia Pro to develop a portfolio of funds that had a minimum 10-year track record; and, in order to reduce the exaggerated effects of funds at the top or bottom of their peer groups, I selected from funds that fell at the 50th percentile in performance relative to their peer groups. For example, I only considered a large value stock fund that was in the middle of the pack relative to other large value funds over the past 10 years.

A total of nine funds and a money market fund were chosen. (The names of the funds are unimportant and not revealed, since the purpose of the exercise is to test the application of the chosen asset allocation with an "average" set of funds.)

As powerful as it is, Principia imposes certain restrictions on the tracking of a historical portfolio. For example, it is only possible to systematically withdraw from a single security, not the overall portfolio. As a result, I had to be somewhat creative to replicate the fluctuating portfolio that the retiring couple may have experienced.

Using the chosen funds, a 10-year track

record for the portfolio was determined using these characteristics:

- A sum of \$300,000 was invested as of January 1, 1989. This 10-year look-back period was chosen because we would have included a period of high interest rates in excess of the 8% required rate of return if an earlier time period had been selected—not the kind of low interest rate environment that currently exists.
- The investments were made according to the allocation suggested above.
- Each year, 6% of the fixed-income investments are withdrawn from the portfolio, while 10% of the equity investments are withdrawn from the portfolio; these are based on the long-term expected returns from these asset classes. The actual values at each withdrawal will vary since the securities will have either gained or lost value. Based upon the original mix of assets, approximately 8% (approximating the required rate of return) of the portfolio value will be taken out each year. A better, more refined method of operating the portfolio will be suggested later.
- The withdrawals are made twice a year, in June and December.
- Any remaining distributions are reinvested within the issuing

security.

- The methodology is measured through September 30, 1998.
- The preceding characteristics will draw, based on original values, \$23,100 from the account. The retirees have an annual calculated "need" of \$24,000, based upon 8% of \$300,000. Of course, \$24,000 is considerably more than they would actually need to spend in their early retirement years. However, it is useful to test the viability of the total portfolio under this type of withdrawal pressure—the rise or fall of the total portfolio value at this withdrawal level will be indicative of the *principal* to be sustained under real-life conditions.

Remember that the withdrawals will vary depending upon the market value of the securities. Due to the software limitations, no withdrawals are taken from the money market account, but the portfolio tries to maintain close to 5% of its value in cash.

Table 1 shows the results of this portfolio activity.

We see that the portfolio value has risen to a value of \$363,000 despite the pressure of the steady withdrawal schedule. Furthermore, every security except for the international equity fund increased in value. Of course, in actual practice, the couple

**TABLE 1. HYPOTHETICAL PORTFOLIO ACTIVITY OVER 10-YEAR TEST PERIOD**

| Holding                   | Initial Investment (\$) | Amount Withdrawn (\$) | Annualized Return (%) | Final Valuation (\$) |
|---------------------------|-------------------------|-----------------------|-----------------------|----------------------|
| Money Market fund         | 15,000                  | 0                     | 4.1                   | 23,411               |
| Treasury Bond fund        | 45,000                  | 29,703                | 6.4                   | 55,251               |
| GNMA fund                 | 30,000                  | 20,243                | 6.4                   | 36,956               |
| Corporate bond fund       | 30,000                  | 20,367                | 6.6                   | 38,156               |
| High-yield bond fund      | 15,000                  | 9,961                 | 6.3                   | 20,131               |
| International bond fund   | 15,000                  | 9,758                 | 5.3                   | 16,977               |
| Mid-cap value fund        | 45,000                  | 46,014                | 9.4                   | 50,016               |
| Large-cap value fund      | 45,000                  | 52,945                | 12.3                  | 63,187               |
| Small-company fund        | 30,000                  | 40,435                | 11.8                  | 37,406               |
| International equity fund | 30,000                  | 25,693                | 5.5                   | 21,948               |
| <b>Total Portfolio</b>    | <b>300,00</b>           | <b>255,119</b>        | <b>8.0</b>            | <b>363,439</b>       |

**TABLE 2. PORTFOLIO ANNUAL VALUE**

Beginning Balance: \$300,000

| Year | Cash<br>Withdrawn<br>(\$) | Ending<br>Balance<br>(\$) |
|------|---------------------------|---------------------------|
| 1989 | —25,567                   | 320,936                   |
| 1990 | —24,374                   | 294,504                   |
| 1991 | —25,762                   | 338,274                   |
| 1992 | —25,915                   | 331,635                   |
| 1993 | —26,791                   | 345,400                   |
| 1994 | —24,645                   | 312,566                   |
| 1995 | —27,113                   | 350,947                   |
| 1996 | —28,584                   | 360,963                   |
| 1997 | —30,304                   | 383,158                   |
| 1998 | —16,064                   | 363,439                   |

would try to rebalance by withdrawing from those securities that are rising more rapidly. In this example, we would have taken more from the U.S. large- and small-company funds and less from the international equity fund.

Although this portfolio ended the period well above its original value, there was some marginal trouble in the early going, as Table 2 suggests.

The year 1990 was poor for the stock market. The decline in valuation, combined with the scheduled withdrawals, caused the portfolio market value to dip below the \$300,000 starting point. This is what could make an income investor

quite nervous. Similar events occurred in 1992 and 1994, but those years were preceded by strong market growth. This sample ends in September 1998. The performance during the last quarter, coupled with the December withdrawal, will determine whether there will be a gain or loss for the year.

Volatility will occur in ways quite difficult to predict. However, it is the long-term trend of a rising market that may introduce greater comfort for investors

who cannot rely strictly upon fixed income to achieve their goals.

Finally, you may recall that one of our goals is to maximize the amount of income derived from dividends. Table 3 gives an indication of how our portfolio did in this regard.

This table suggests that nearly 92% of the GNMA fund's annualized return was attributable to dividends. Not surprisingly, fixed-income funds have a much higher dividend/total return ratio. The attribution ratio for the high-yield bond fund was in excess of 100% because the fund actually had a capital loss during the period while issuing a high dividend stream.

The ratio for the large-cap value fund is most telling. The dividend yield of this fund was nearly 2% (12.3% times 16.2%). Although the fund was not explicitly selected for its dividend yield in this example, in general a value fund with a current income return of 1.5% or more is probably relying on dividends as a strategic piece of its anticipated return.

The minimal (0.8%) dividend yield of our mid-cap value funds could be improved with more careful selection. The apparently high ratio for the international equity fund is some-

what misleading since the fund performed quite poorly. The dividends issued were simply a high percentage of a relatively low return.

It is difficult, and not necessarily desirable, to look for a high dividend yield from the small growth category. This asset class should form the aggressive growth component of the income-oriented portfolio without regard to dividend potential.

## FROM HYPOTHESIS TO REALITY

In this example, the withdrawal of a specific percentage of each fund each year was done for simplicity, to work within the parameters of the evaluation software. However, in practice, investors will need to operate under more strict guidelines.

The retiring couple calculated a required return of 8.15%, or an increased portfolio valuation of \$24,450 annually. They will only withdraw \$15,000 during the first year, which will increase by 3% each year thereafter. Ideally, the increase in portfolio value will compensate for the inflation-adjusted increase in annual withdrawals.

Here are some suggestions for operating an income portfolio under real-life conditions:

- At least nine months of cash should be kept on hand to accommodate distributions.
- Use a brokerage account to consolidate your holdings and permit easier trading and withdrawals.
- Dividends and capital gains should not be reinvested but used to replenish the underlying cash account and rebalance the portfolio.
- Cash can run temporarily lower if you believe the market environment is weak; that is, you may want to resist selling into market weakness.
- Conversely, you may want to sell into market strength, slightly reducing the exposure to assets that have enjoyed a more rapid rise.

**TABLE 3. PORTFOLIO INCOME FROM DIVIDENDS**

| Holding                | Annualized<br>Return<br>(%) | Return<br>from<br>Dividends<br>(%) |
|------------------------|-----------------------------|------------------------------------|
| Money Market fund      | 4.1                         | 100.0                              |
| Treasury Bond fund     | 6.4                         | 74.1                               |
| GNMA fund              | 6.4                         | 91.6                               |
| Corporate bond fund    | 6.6                         | 82.0                               |
| High-yield bond fund   | 6.3                         | 108.3                              |
| Int'l bond fund        | 5.3                         | 97.5                               |
| Mid-cap value fund     | 9.4                         | 9.2                                |
| Large-cap value fund   | 12.3                        | 16.2                               |
| Small-company fund     | 11.8                        | 0.0                                |
| Int'l stock fund       | 5.5                         | 17.6                               |
| <b>Total Portfolio</b> | <b>8.0</b>                  | <b>40.5</b>                        |

- The portfolio should be carefully monitored each year. There is always the possibility that declining market values could put the long-term viability of the portfolio in jeopardy. If the market value is falling to unacceptable levels, a re-assessment of the income requirements is in order. In some instances, a slightly riskier asset mix may be needed in the hope that lost ground can be recovered.

Conversely, an increasing market value beyond original requirements should also trigger a re-examination. Is the investor still satisfied with the original income need? If so, a reduction in risk is called for. The required rate of return opposite a rapidly increasing pool of assets should be reduced. You should take no more risk than that which is necessary to achieve your financial objectives.

What about the specific investment choices?

Mutual funds are a good choice for many investors because they offer significant diversification benefits for smaller amounts of money. Our firm sticks with mutual

funds even for accounts well in excess of \$1 million. The funds selected for the example above were limited to middle-of-the-road choices as a conservative test of the portfolio. In practice, however, you would want to be more selective in choosing the specific funds.

Here are some more tips for selecting the specific investment choices in support of an income requirement:

- Place an absolute priority on low expense ratios, especially for the fixed-income component.
- Beware of fixed-income funds that wildly fluctuate vis-à-vis their peers, even if their average annual returns are high. In addition, look out for high-performing funds with a dividend payout ratio that is lower than average. Funds that fluctuate wildly and those with lower payout ratios may reflect a manager actively trading and making interest rate bets.
- Choose fixed-income funds that have strong returns generated primarily from yield.
- Keep maturity selection in the short and intermediate ranges to

limit interest rate risk.

- Emphasize "value" domestic funds, especially in the large- and mid-capitalization classes. Be certain that the manager uses dividend parameters as a major part of the security selection.
- Investors who understand real estate investment trusts (REITs) may consider this asset class in addition to the ones previously mentioned. REITs offer an extremely high dividend payout, but the security must be considered an equity security for purposes of risk assessment.

The most difficult thing for many income-oriented investors to grasp is that they will have to sell shares in order to generate the required distributions. Certainly, the hope is that the securities being sold go up in value in conjunction with the occasional sale. However, the reality is that the fluctuation will be both up and down. Nevertheless, investing for income in a low interest rate environment requires a modified approach that requires more thought and greater care than the ways of the past. ♦