

Earning Income to Live On

“I have no regard for money. Aside from its purchasing power, it’s completely useless as far as I’m concerned.”

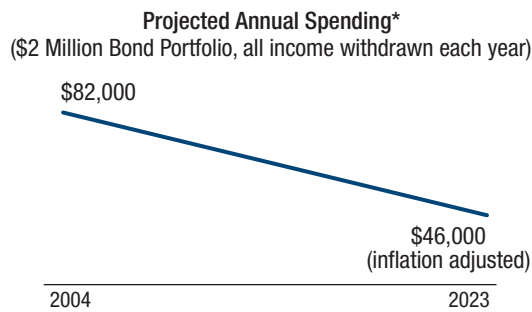
—Alfred Hitchcock

They say a fool and his money are soon parted—but eventually we all have to part with the money we’ve invested, whether to pay for a child’s education, care for an aging relative, live on in retirement, or pass on to our heirs or favorite charity. The basic reason for investing is to earn money to be spent—either now or in the future. And the most foolish thing is not to have planned for that spending.

Most investors rightly associate investment income with bonds, since bonds have historically generated more and steadier income than stocks have. But the truth is that bond investments have seldom grown enough after taxes and inflation to support a long retirement, let alone preserve capital to be passed on to one’s heirs. If you spend all your interest income as you earn it, your bond portfolio will almost surely lose purchasing power over time, particularly after taxes. This means you’ll have less to live on as the years go by (*Display 20*).

The best protection against that outcome is apportioning some of your capital to stocks—the financial asset most likely to beat inflation even after taxes and spending (*see Display 1, page 3*). But the more you have in stocks, the more vulnerable you are to short-term loss. We’ve found that a portfolio divided 60/40 stocks to bonds provides an especially good combination of growth potential, stability, and probable ability to support a reasonable spending budget over the years, so that’s what we’ll examine in this chapter.

Don't expect your bonds alone to sustain your lifestyle in retirement



* In constant dollars assuming 4.09% payout, 3% inflation, and after state taxes; bonds are intermediate maturity diversified municipals. Source: Bernstein analysis

Devising a Sound Spending Strategy

But what is a reasonable spending level? And what's the best strategy for withdrawing money? Bernstein has devoted extensive research to these questions, which also involve asset allocation and tax and inflation estimates. If you don't withdraw from your portfolio at all, you have the best chance of coming out ahead after taxes and inflation. But most of us will need to draw on our invested capital at some time, often for 20 to 30 years or even longer.

To illustrate the difference that spending policies can make, we hypothesized a 60/40 global stock/bond mix formed 40 years ago,* with the 40% bond component in intermediate-term (five-year) municipal bonds. Our sample portfolio was worth \$1 million in 1965—equivalent to \$6 million today. We taxed the portfolio over the years at the federal rates appropriate to the income and capital gains it generated as if this were the investor's sole source of income† and ignored state taxes. We examined the effects of three typical spending strategies: (1) withdrawing a fixed percentage of the portfolio each year (we used 5%, although actual spending allocations run the gamut in common practice and sometimes change over time); (2) withdrawing all dividends and interest; and (3) withdrawing all dividends, but only the portion of interest

* Data we consider reliable on foreign stocks date back to roughly 1970, and so we assumed that the foreign stocks were mixed into the portfolio at that time. Data we consider reliable on the emerging markets date back only to 1985, and we assumed emerging-markets companies were added to the mix as of then.

† See footnote to Display 1, page 3, for tax assumptions

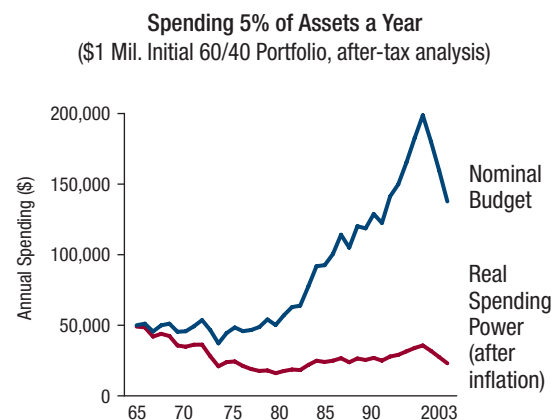
that exceeded the inflation rate. (Here, as a rigorous litmus test for the effects of spending, we assumed withdrawals over the full period rather than in just the later years.) Was there a difference in the lifestyle these approaches could support, or in the money remaining in the portfolio at the end of the period?

Income-Based Spending Steadier

If you withdrew 5% of your portfolio's value every year, you had \$50,000 to live on in the first year, as you see in Display 21. But by 2003, while your nominal withdrawal had risen to about \$138,000, that worked out in real (after-inflation) dollars to only about \$23,000, or little more than half your original budget. Moreover, there were steep declines in your income—notably, after the bear markets of '73–'74 and '00–'02—as well as impressive increases, particularly in 1996–2000. More important to some investors, while the nominal value of the portfolio grew to \$3.2 million over the years, by 2003 that was equivalent to less than \$530,000 in 1965 dollars. The purchasing power of the portfolio itself had declined almost by half.

What if you had followed the other approach—living off your income and leaving the principal untouched? The top chart in Display 22 shows that you'd be much less vulnerable to stock-market move-

Spending 5% of your portfolio a year, you enjoyed a comfortable standard of living at first—but lost half your purchasing power in later years



See footnote to Display 1, page 3, for portfolio details and tax assumptions

Source: Bureau of Labor Statistics, Compustat, CRSP, IFC, Lehman Brothers, MSCI, and Bernstein

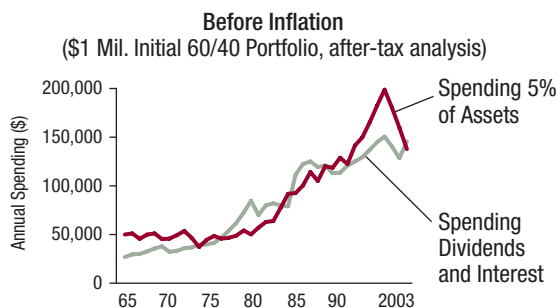
ments than if you'd spent 5% of your assets: The 1973–74 decline barely would have dented your spending budget. And because your yield was generally less than 5% over this period, your portfolio would have had more chance to grow, providing for growth of income, too, over the years. Although your 1965 income would have been only about half the budget available with the 5%-of-assets strategy, the income-based budget would sometimes have come out ahead. And it would have held far steadier than the 5% budget would after inflation and taxes (*Display 22, bottom*).

But here's the astonishing part. Although there was little difference in the total dollars spent over the years, the second strategy would have resulted in a huge difference in what was left in the portfolio in the final year—some \$840,000 in 1965 dollars for the income strategy versus \$530,000 for the 5%-of-assets approach.

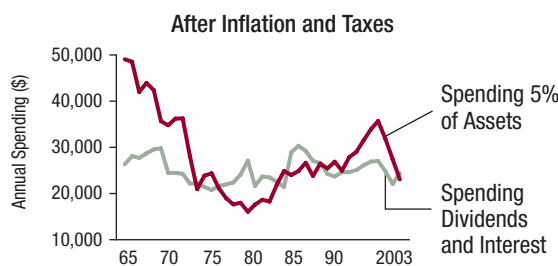
Another common strategy is to withdraw a set amount in your first year of regular withdrawing and stay with that amount over the years unless and until your needs

Display 22

Spending only dividends and interest lowered your budget initially...



...but preserved your real spending power over the years



See footnote to Display 1, page 3
 Source: Bureau of Labor Statistics, Compustat, CRSP, IFC, Lehman Brothers, MSCI, and Bernstein

change, either because of inflation or for any other reason. This strategy's appeal is that it enables you to maintain your spending budget regardless of your investment results. The problem, though, is that it can convey a false sense of security, particularly if your withdrawals are on the high side in relation to your assets. If markets are especially poor during your withdrawing years, and you never think about adjusting your budget in accord, you may be worse off later in life than you'd like.

Real Spending Power—and Real Wealth

None of these strategies produced enough portfolio growth after taxes and spending to match inflation. One way around this might be to spend interest only insofar as it exceeds inflation. When inflation is greater than the yield on your bonds, you'd spend only your stock dividends.

The left chart in Display 23 shows the annual budget that this approach would have produced, before and after inflation, since 1965. Income would have changed abruptly from year to year since 1980. Every change in interest rates or inflation would have had great impact. This policy also would have produced less starting income than either of the other two alternatives—only \$19,000. On the other hand, the income produced would have grown more over the years, and in the final years would have been modestly higher than with either of the other strategies (*Display 23, right*). Even so, you'd have spent less in aggregate over the years, and thereby protected your portfolio from inflation. In the end, you'd have maintained all your real wealth—in fact, actually increased it by nearly 50%.

Which Bonds Are Best?

In the preceding analyses, we assumed 40% of the investment dollars were in intermediate municipal bonds. But there are many choices available in the fixed-income market. Caveat emptor! Some bonds that look attractive contain traps, and others that look unappealing may be bargains. One common mistake in the quest for investment income is relying too heavily on money-market investments. As safe from nominal losses as they are, Treasury bills, CDs, and money funds typically offer the lowest yields of all investment choices, and they're also the most vulnerable to the effects of inflation and interest-rate reductions.

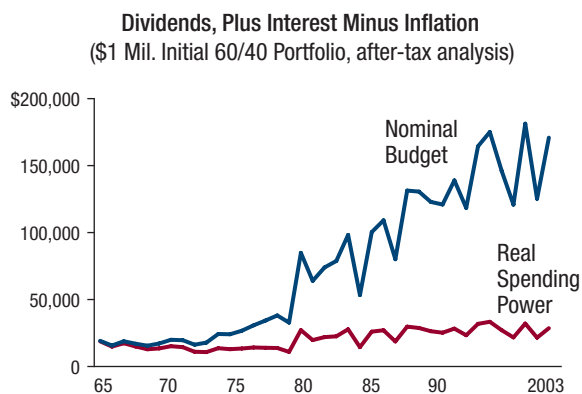
Don't Buy on Yield Alone

But there are also pitfalls in reaching for the highest yield you can get, and one of the most common is looking *only* at yield. Many investors assume that yield represents the actual return they'll get. But in reality, "yield" is just an *estimate* of future return under the almost-never-justified assumption that the bond market will sit still until the bond matures. The fact is, that high yield number you're so attracted to won't always translate into actual return.

Callable bonds are a prime example of the false allure of yield. When a bond is called, the issuer instructs you to return the bond even though it hasn't matured and pays you the bond's face value, often with something extra tacked on. But this happens only when interest rates have fallen so much that the issuer wants to refinance at a lower rate. And that's just the kind of time when it's in your best interest to hold onto your bond, because you can't reinvest your money elsewhere at the same high rate. Callable bonds almost always offer higher yields than non-callables because of this risk, but rarely enough to compensate you fairly. This holds true especially in municipal bonds. And so Bernstein stays with non-callables except when callables clearly offer enough extra return potential to justify taking the risk.

Display 23

Withdrawing only stock dividends and after-inflation bond interest preserved real spending power...



See footnote to Display 1, page 3

* Not inflation-adjusted

Source: Bureau of Labor Statistics, Compustat, CRSP, IFC, Lehman Brothers, MSCI, and Bernstein

Inflation-Adjusted Treasuries Work

While bonds generally can't provide both steady interest and inflation protection, there is one exception: inflation-protected Treasuries, often called TIPS. The value of these bonds is linked by the government to the Consumer Price Index: When that index rises, so does the principal value of an inflation-protected Treasury. And while its interest *rate* is fixed, its interest *payments* rise, too, because they're now based on a higher amount of underlying principal. Theoretically, then, TIPS assure you of beating inflation.*

Still, the government giveth and the government taketh away. If you own TIPS in a taxable account, the inflation-induced gains are taxed as ordinary income rather than more-leniently taxed capital gains, and so the bonds don't fully protect against inflation after all! For this reason, we consider TIPS appropriate mostly in tax-deferred or tax-exempt accounts, where their income is unavailable for withdrawal without tax penalties until age 59½. And even here, ironically, when inflation fears are high, TIPS may be selling at such high prices that their yields may *not* protect you against inflation. As

* This isn't completely assured, since there's a three-month lag between the time the CPI is measured and adjustments are made to the bond's principal and interest payments. Hyperinflation in the last three months of a bond's life could cause it to lose out to inflation.

...and was the only spending strategy that increased real wealth over time

60/40 Portfolio	1965 Budget	2003 Budget (After Inflation)	Total Spending* (\$ Mil.)	2003 Portfolio Value (\$ Mil.)	2003 Portfolio Value (After Inflation)
Spending 5% of Assets	\$50,000	\$23,000	\$3.4	\$3.2	\$530,000
Spending 100% of Income	27,000	24,000	3.2	5.0	840,000
Spending Dividends and After-Inflation Interest	19,000	29,000	3.0	8.9	1.5 Mil.

with any other securities, you've got to be price-conscious in TIPS to get what you think you're getting.

Complexity: Risk or Opportunity?

Generous-yielding residential mortgage-backed bonds can also be deceptively alluring. Like conventional bonds, mortgage securities get hit when interest rates rise, but they may also suffer when rates fall. Homeowners rushing to repay their mortgages to refinance at lower rates cause mortgage bonds to act like callable bonds: They come due faster than expected, forcing holders to reinvest at lower rates.

Still, mortgage bonds can be excellent investments at the right price if analyzed carefully. Often they're sold in pieces called collateralized mortgage obligations, or CMOs, and understanding these requires special insight and computer power. Like any derivative—a security whose value is derived from something else—CMOs contain arcane provisions that go well beyond the average bond's straightforward promise to pay fixed amounts of interest for a fixed period of time. The trick is to figure out how the CMO earns its returns, measure the fit between its risk/reward profile and your own, and assess how the security will interact with the rest of your portfolio. The very last thing to do with one of these pieces of paper is to judge it by its yield alone. Indeed, research-driven professional bond management is tailor-made for such securities.

Sometimes Smart to Pay Premium

But if some bonds are deceptively beguiling, others possess charms that masquerade as drawbacks. For instance, premium bonds sell for more than their

Display 24

*Bonds can surprise you:
It can be profitable to pay more than par*

	Par Bond @ 6.50%	Premium Bond @ 9%
Initial Price	\$1000	\$1020
Redemption Value	1000	1000
Capital Gain/Loss	0	(20)
Coupon Income	65	90
Total Cash Flow	65	70
Total Return	6.50% (\$65/\$1000)	6.86% (\$70/\$1020)

face value (*Display 24*). Why pay more for a bond than you'll get back at maturity? One reason is that premium bonds generate more interest than bonds selling at face value. They wouldn't command premium prices unless their coupon payments exceeded the prevailing rate. In theory, the extra cost of these bonds will exactly offset their extra income, so that your return over time will be the same as that from a par bond. But often that's not the case: Many people simply refuse to pay more than face value for a bond no matter what. Therefore, the price you need to pay to get that higher coupon rate is very often less than what's necessary to balance out the extra income.

No Bond for All Seasons

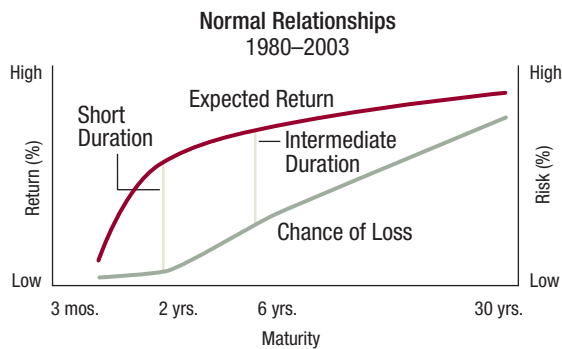
Bonds can be mispriced for a host of other reasons, too—and no single sort is appropriate for all periods. How do you know which bonds will do well and which poorly in any given year? Events occur every day that raise or depress the prices of various bonds to varying degrees—interest-rate changes, credit-rating changes, and all sorts of hopes and fears. Like stock investors, bond investors are influenced by emotion, and the resulting gains or losses are as real a part of returns as interest payments.

Solid research makes the best soothsayer in such situations, especially since the taxable bond market alone comprises some 4,000 issuers. Indeed, capitalizing on bond mispricings is simply value investing applied beyond stocks. As long as any market is populated by human beings buying and selling based on their viewpoints and emotions and not just on the numbers, misvaluations will occur, and a value investor can get extra return without commensurate extra risk.

Key Decision: Right Maturity

But the most critical decision you can make as an income-oriented investor relates to the maturity of your bond portfolio. Certain maturities are generally better buys than others. The top curved line in *Display 25* shows the expected returns of bonds of various maturities under normal conditions (this is just like the “yield curve” except that it takes into account estimates of upcoming price changes as well as interest payments). As you'd suppose, return potential rises along with

**You get more return for the risk
in the two- to six-year maturity range**



Based on U.S. Treasury bonds
Source: CRSP, Federal Reserve, Salomon Smith Barney,
the *Wall Street Journal*, and Bernstein

maturity: Investors demand more compensation for tying up their money for longer periods.

But notice that the line doesn't rise evenly: It ascends quickly at first and then much more slowly. In effect, it doesn't pay to extend your average bond duration too far, "duration" being a more technical, accurate measure than maturity (see page 39). We estimate that you'll earn 1.1 percentage points more a year on average by moving from the money-market range to two-year bonds, and another seven-tenths of a percentage point or so by extending out to five- or six-year bonds. After that, the additional return mounts slowly indeed: Our research indicates that by moving from six-year bonds all the way out to 30 years, you'll pick up only about one-third of a percentage point a year over time. This is paltry reward for the added price volatility.

The Long and Short of Losses

Now observe the lower arc of this same graph. It depicts the chances that bonds at the various maturities will suffer a loss over any 12-month period—that is, will decline in price enough to offset the whole year's interest. What's most striking here is that the chance of loss doesn't rise evenly as maturity increases; in fact, its path is the mirror image of return. Just as return mounts fastest at short maturities, risk mounts fastest at the longer end of the spectrum.

Over most of the past three decades, two-year Treasury bonds have earned in excess of a full percent-

age point a year more than money-market investments with virtually no extra risk: Two-year bonds have never lost money over a year's time. Intermediate bonds have earned practically as much as long-term bonds but with far fewer losses along the way. Clearly, building your bond portfolio around a short or intermediate maturity assures an optimal risk/reward profile.

The Good and Bad of Rising Interest Rates

So far, we've been talking about the long run—what typically occurs over a full interest-rate cycle. But things look different at different points within the cycle, and the most difficult phase is when interest rates are rising. Bonds lose value when rates rise: Their fixed interest payments are worth less when newer bonds are paying more, and the longer the term of the bond, the more it falls in price. After all, you've agreed to rent out your money at the going rate for many years.

Does this mean you should sell your bonds when interest rates seem likely to rise? Probably not. Certainly, if you could forecast interest-rate movements with perfect accuracy, such bond-market "timing" would be productive. But even investment professionals can't manage this with any consistency. And since there's also a potent advantage in rising interest rates—a rise in your investment income—we've found that the best course is to stay put.

How to Choose Between Short and Intermediate

But which of the two "sweet spots" on the bond-maturity spectrum—short-term or intermediate—is best for you? The risk/reward trade-offs are shown in Display 26. Yields are generally higher and more stable at the intermediate mark than at shorter maturities, but prices are more volatile. If high income over time is your first priority, an intermediate portfolio will serve you best. If you look to bonds first of all for safety, short-term may be better. Or perhaps an average maturity somewhere in the middle is your soundest course.

Display 26

<i>If you want:</i>	<i>Then choose:</i>
More stable income	➤ Intermediate bonds
Higher returns over time	➤ Intermediate bonds
Greater safety of principal	➤ Short-term bonds
The best counterweight to stocks	➤ Short-term bonds

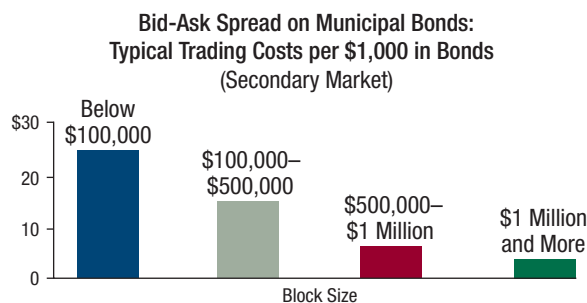
Municipals Are More than a Tax Break

No matter what their maturities, however, all bonds except most municipals share the drawback that their income is federally taxable—and at the ordinary-income rate even at a time when *dividend* taxation has been reduced. This is why bonds issued by states, localities, and their various agencies are so popular with high-bracket investors, even though their capital gains are taxable. The problem is, the municipal-bond market is even more immense than the taxable bond market, and it can be even more confusing. As many as 50,000 separate entities issue such bonds, and they vary in complexity and risk. Callability is just one of the municipal market's pitfalls. In a recession, municipal bonds can be downgraded quickly when governments run into fiscal trouble, causing bond market values to drop overnight.

Moreover, you'll find that the difference between the price a bond dealer gets and what you pay or receive for the same "muni" can be extremely large—and the smaller your order, the wider this spread. Although some gap between the bid and ask price exists for any sort of bond—after all, it's how the broker or dealer makes money—the gap is most extreme in municipals. The cost differential between trading \$50,000 of bonds and \$1 million can be \$20 or more per \$1,000 (*Display 27*). Mutual funds and investment managers thus have a distinct advantage over ordinary investors, who, in paying more and selling for less, diminish their return. For this reason, and also because of the sheer size and complexity of the municipal market, professional management of municipal-bond investments makes particular sense.

Display 27

***Bonds are cheaper when traded in quantity:
Professional managers have an advantage***



Source: Bernstein estimates

“Home-Along” Investing Can Be a Mistake

Here's yet another example of bond complexity. Although it may seem obvious that you should buy only your home state's municipal bonds, since only locally issued bonds spare you state and sometimes local taxes on your interest, this isn't necessarily the best course. Unless you live in certain populous states with high tax rates, such as New York and California, the home-state tax benefit is usually outweighed by other considerations. For one thing, the state or local taxes you pay on out-of-state municipal-bond income are deductible from your federal taxes. We calculate that the after-tax yield advantage of a home-state bond generally nets out to only one- or two-tenths of a percent per year for the typical investor. On a \$100,000 investment, that's \$100 to \$200 a year.

Why give up any extra income, even if it's small? Because the lower risk of a geographically diversified portfolio tends to more than compensate for the few dollars sacrificed. Eliminating dependency on the fiscal fortunes of a single state with relatively few bond issuers will confer credit stability on your portfolio.

One Size Doesn't Fit All

Our research and experience in matching investment income to spending needs leads us to conclude the following:

- A combination of stocks and bonds is vital to ensuring adequate future income. Bonds alone can't provide the necessary growth.
- Building wealth is highly sensitive to spending policy. The more generous policies we tested permitted you to spend 20% more than the least generous plan, but the least generous allowed you to build almost three times more capital than the others. In other words, money not spent today can pay off bigger later.
- Income planning isn't a one-size-fits-all proposition. One strategy is appropriate if you have heavy needs now and don't care whether you leave a large estate. Another strategy may work better if your income needs are moderate and your goal is to leave a large bequest. Only you can make the trade-off, but you should start with the facts.