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The Why and How of Fixed Income

Why Consider Fixed Income?

Growth versus Income (Stocks versus Bonds)

Experts have been saying for years how much better stocks have been in providing long-term profits than bonds. Depending on which study you read, stocks have returned an estimated 7 to 11 percent a year for the past 100 to 200 years. Bonds, on the other hand, are credited with returns of just 2 to 4 percent, again depending on the study. The obvious conclusion the investor is supposed to draw from these studies is that a choice between stocks or bonds is a no-brainer. Why, then, are the fixed-income markets several times bigger than the stock market? Why do many more investment dollars go into bonds and preferreds rather than stock? There are many ways to answer this question, and in those answers, you may just find your reason for considering fixed-income securities.

The principal reason fixed-income securities have faired badly in these studies is inflation. Inflation has historically sapped anywhere from 20 percent to more than 100 percent of the return paid by bonds. While this remains a perennial weakness of fixed-income securities, it has become less so over time. The ravages of inflation are much better understood today by those in government whose responsibility is to control it. More important, the tools for controlling it are in place and not as vulnerable to the political forces of the day. Another reason for the poor showing for bonds is that such studies used U.S. Treasuries as the fixed-income benchmark. While this is the premier bond instrument in the world, it is hardly representative of the fixed-income universe. Because of its high quality, it is easily 1 to 4 percent below most other debt instruments in its rate of return. Today's bonds and preferreds offer an array of risks and yields for which no historic equivalent exists for comparison. This book focuses on many of these investment instruments, many yielding relatively low-risk returns of 8 percent or more.

A second consideration in evaluating stock-versus-bond studies is volatility. The returns cited for equities include years in which they were as much as plus or minus 20 percent. Additionally, within any given year, price fluctuations of plus or minus 50 percent are not uncommon. Hence, any given investor, depending on when and how much he or she invested, could average less than half or more than twice the 7 percent return rate, which has been cited by studies as a long-term average. Buying into a mutual fund can mitigate some of the intrayear volatility, but not the interyear volatility. Bonds, on the other hand, have only a fraction of this volatility. In fact, you control much of it by virtue of how long a maturity date or credit quality you select.

With stocks, the investor is putting his or her future into the hands of company managers whose skills, priorities, and loyalties are constantly shifting and open to question. While high salaries and generous options are given to them to ensure loyalty, this has proven only partially successful and may serve to encourage risk taking beyond their management skills in order to enhance stock prices. With bonds and preferreds, investors are insulated against most mismanagement unless it proves fatal, but even then, they stand ahead of shareholders in being repaid in any corporate reorganization or liquidation. Investing via a mutual fund

further removes the investors' control over their funds, since now the judgments and priorities of the fund managers are a factor as well.

Looking forward, I doubt whether past history is the best way to predict future performance. The principal reason for this is that past stock performance was in large part due to high dividend payments. According to a recent study by Robert Arnott and Peter Bernstein in the *Financial Analysts Journal*, as much as 5 percent of the 7 percent historic return for stocks came through dividend yields. During the 1990s this percentage dwindled to 1.5 percent. This is one of the unintended consequences of management stock options. Since stock options become valuable through price appreciation, not dividends, profits are going to be used either to buy back shares or launch new ventures, no matter how marginal. The study went on to note that only 1.4 percent of the 7 percent historic return came from earnings growth. Since economic growth has been over 2 percent for most of this century, it means public companies are not keeping pace with the economy as a whole. Hence, the money retained by corporations got a poorer return for investors than the 5 percent that they distributed. What then can we expect now that dividend payouts have slipped to only 1.5 percent? Although recent tax law changes have made dividends more attractive, increases in dividend payouts have been slow to gain momentum, which has not been helped by the fact that the tax law change is set to expire in 2010 unless extended by Congress.

The main reason, though, why bonds will continue to outsell common stocks is that they reflect the wisdom expressed best by Ben Franklin: "A bird in the hand is worth two in the bush." Fixed-income securities offer a definite rate of return and a definite date in the future when they will return a definite amount owed. These are, or should be, of ever-increasing importance the closer one gets to retirement.

Selecting stock investments differs from selecting a fixed-income security in one critical respect. *In order to profit in stocks, the company must prosper. Not so for fixed income. To make money in fixed-income investments, the company need only survive.* Making a judgment about a company's ability to prosper is often extremely complex, because it is so dependent on such intangibles as the general economy, the legal environment, industry trends, management ability, and just plain good luck.

Judging a company's ability to survive is more dependent on data and much less dependent on intangibles. Learn how to understand the data and you've learned how to invest.

Understanding the data, however, does require learning how to interpret it. This is not to say that the intangibles affecting stocks don't also affect bonds, but rather that the effect is generally not as severe and takes place over a longer period of time.

What Kind of Investor Are You?

You may have picked up this book precisely because you don't know the answer to this question. Hopefully, you will be able to answer it before you are finished reading. The question usually comes up because many individuals fail or even resist putting themselves into a defined category. Yeah, I'm unique. But I haven't saved enough for my retirement, and I'm getting close enough to retirement to worry, and I don't have a clear plan for saving or a clear investment strategy, and I don't even know how much I'll need to retire, and my present investments are going nowhere. Sure, you're unique, but maybe you can find your spouse or an anonymous friend in the following investor types.

The first and most common investor species is the *buy and hold investor*. These investors buy good, safe things like Treasuries, munis, CDs, money market funds, and investment-grade bonds. They want to sleep well at night, so they take no risks. They also get a lousy rate of return. Ideally, we'd all like to be so blasé about investing, but most of us don't have enough resources to afford that, as evidenced by the fact you are reading this book. (Just kidding!)

The second investor type is the *total return investor*. These individuals want to grow their portfolio by both income and capital appreciation and have no current urgency for cash income. They have a broader array of investment choices and a bit higher risk tolerance level. They are generally still working full-time and growing their portfolio as much by new savings as by portfolio growth. *This group will get the most benefit from this book.*

The third type of investor is the *scared investor*. These individuals are scared of any risk, probably because of bad personal experience, or

they are scared because they haven't a clue about investing. This group is the most sought after by financial industry people because they can be talked into buying the most expensive or risky investments. They buy mutual funds and whatever else a broker can talk them into because they won't take the time or effort to learn investment fundamentals such as are found in this book. *I can help scared investors if they are willing to learn, because mentally they have the most important attribute an income investor can have—fear.*

The fourth type of investor is the *desperate investor*. These people know they are way behind in planning for their retirement and are looking to hit a home run to catch up. They differ from the scared investor in that they think they know what they're doing because they've had some successes in the past. What they've really had in the past was a smattering of luck and selective memory. The fact that they're desperate means their luck comes only now and again. If you are one of these investors, you are beyond my help. Return this book to where you bought it and ask for your money back. And this time, I'm not kidding!

It's not my goal to fit everyone into my formula for income investing. You need to develop a strategy with which you can be comfortable for years or even decades—one that can succeed across different business cycles and financial downturns. If you learn the fundamentals detailed in this book, I'm sure a more confident you will emerge. And that new you will become a more successful income investor.

Investment Strategies

Asset Allocation

How many investors can tell you what their asset allocation is? For that matter, how many investors can tell you what asset allocation is? To appreciate the importance of this investment basic, let's first define it. *Asset allocation* is how you distribute the discretionary portion of your net worth among various categories of assets. By *discretionary* portion, I mean the assets that you own and that you could reallocate without having to change your lifestyle. The easiest system consists of the following six categories:

1. *Cash*. Includes CDs and money market funds.
2. *Fixed-income securities*. Includes bonds, preferreds, and convertibles.
3. *Common stocks*. Includes all equities in public companies or in mutual funds. The family business is not included.
4. *Collectibles*. Includes art, gold, diamonds, postage stamps, coins, and other tangible assets with an investment value.
5. *Real estate*. Includes only your nonresidential real estate.
6. *Other assets*. Includes partnership investments, tax shelters, and any asset you hold that is not part of your lifestyle or business.

It is a worthwhile exercise for everyone to take the time to list their asset holdings under each of the preceding six categories. Exact values are not important at this stage—just be sure you count everything.

Once you have completed this exercise, determine what percentage of the whole (100 percent) each category represents. Let's evaluate the results. Add up the dollar amount of categories 1, 2, and 3. These are the assets that can provide you with a steady retirement income. Multiply the dollar value by 7 percent (a theoretical rate of return and drawdown of your capital that can be maintained over a normal life expectancy) and ask yourself whether the resulting amount is sufficient, when added to your pension benefits, to supplement the income you expect to need when you retire. If not, then look at categories 4, 5, and 6 and ask yourself which of these you should consider selling in order to increase your income. Too often, we find ourselves holding assets in the 4, 5, and 6 categories that we inherited or purchased for reasons that no longer matter. This is not the time to be sentimental, unless you can afford it.

The Right Allocation for You

The right answer to the allocation question is clearly personal (i.e., the combination that will help you achieve your investment goal). If you are a 55-year-old baby boomer who has not saved enough to retire comfortably by age 67, you may be tempted to allocate 100 percent to stocks in hopes of catching up. As I point out later in the chapter, under "Retirement Planning," this is not the time in your life to test your luck, because

you have little room to err. If you are well along in saving for your retirement, and all future appreciation will only fatten the estate you will leave behind, then you have room to take a heavier stock position. My advice to someone 55 or older who needs to catch up is, start with a 50/50 (stock/income) allocation and reduce the stock allocation by 1 percent each year, so that by age 67 your allocation will be 38/62. This approach may or may not work for you. An important consideration here is your comfort level with whatever strategy you pursue. Keep in mind, however, that finding comfort through buying one or more mutual funds is not a sound strategy for reducing stock market risk. More on this later.

Diversification

Diversification is easily the most important subject in income investing. When you bring up the subject of diversification to an audience of fixed-income investors, they tend to think of traditional mantras such as the following:

- Don't investment too much in any one security or issuer or industry.
- Spread your investment among different rating qualities and instruments
- Ladder your maturities.

These guidelines are meant to help investors minimize their exposure to loss from defaults, credit crunches, and inflation. *In principle, these traditional guidelines are inherently good ideas, but much too limiting for today's investing climate. The problem with them is that they are basically defensive in scope.* They assume fixed-income investors must constantly protect against declines in the value of their portfolio, since, with traditional fixed-income instruments, the par value and maturity of the instrument limits any upside appreciation while downside risks are limitless.

Looking at these diversification guidelines in greater detail, well, yes, it's never a good idea to have too large a stake in the fortunes of any one company. Generally, 5 percent is a good upper limit on any one

security or issuer. Such a policy, however, makes no exception for special-situation investments, which I cover later in this section. Diversification by industry makes sense only because the market is irrational. Right now fixed-income investments in the auto industry are taking a beating, in part because it is receiving so much bad press. Fixed-income investors often run from an industry when this occurs, even though the doom and gloom the media is talking about falls almost exclusively on shareholders and not on debt holders. This is a downside risk for income investors mainly because any eventual good news gives little upside boost to a company's debt until the whole industry turns around.

Spreading risk among different rating qualities is an attempt to offset the dismal returns on A- to AAA-rated issues by blending in some BBB and BB issues. As I explain later in the chapter under "Credit Ratings," all that investors should be concerned with is getting their interest payments on time and recovering their principal at maturity. Only if there is reasonable doubt about a company's survival should investors be concerned with the credit instrument and its terms (i.e., how senior is the debt, what is the collateral, and which debt issues are first in line if the company does go bankrupt?).

Laddering maturities is a strategy that spreads your maturities over short-term and longer-term issues so that in the case of any interest rate spike you take a lot of little hits instead of one big one. It also provides a continual cycle of maturing issues that can then be reinvested at current interest yields. The flaw here is that when the interest rate yield curve is flat or negative, as it is at the time of this writing, you get no premium yield for buying longer maturities. Laddering makes sense mainly if your selection of maturities coincides with your expected drawdown of the funds involved (i.e., if you plan to spend everything as it matures).

My definition of *diversification* is "allocating capital over a selection of instruments that are responsive to widely different economic events." I call this *diversification over different income drivers*. This means that you should not rely on some guru's forecast of what interest rates are going to do or whether default risks are rising—assume they are just guessing, because they are. Today's investment market offers individual investors a vast array of often confusing products. However, this array of products also offers the opportunity to diversify your holdings among a

variety of securities that have only a passing link to interest rates or credit quality. Hence, you can build a fixed-income portfolio much like you build a stock portfolio. But rather than diversifying over a variety of companies and industries, which may currently be hot or countercyclical (or may not), you diversify over a variety of prospective economic events. Let me demonstrate using the investment climate as it looked at the beginning of 2007 as an example.

Begin with a selection of interest rate–sensitive issues. If you consider yourself a medium-risk investor, start by allocating 40 percent of your portfolio to investment-grade bonds and preferreds down to a rating of BB. Don't get hung up on the concept of investment-grade versus junk-rated issues (ratings are discussed later in the chapter). Don't overload on very highly rated bond issues, either—most are currently overpriced. Shoot for a composite return of at least 2.00 percent over U.S. Treasuries. It is difficult to avoid exposure to interest rate swings, and occasionally (e.g., 1982 to the present) long-term rates actually declined, boosting the value of your holdings. True, many analysts promote investing in U.S. Treasury Indexed Performance Securities (TIPS) and adjustable-rate bonds as the perfect way to offset inflation and rising interest rates. But in the present low-inflation environment, what you give up in current yield in exchange for protection against the possibility of rising inflation is just not worth it (see Chapter 3, "Bonds," for a discussion of these securities).

At the beginning of 2007, the stock market looks promising, so a portion of your portfolio (I recommend 20 percent) should be allocated to convertible bonds and preferreds. Should the stock market continue rising, these securities will look to the stock price rather than interest rates for their valuation. In 2005, even with a relatively flat stock market, convertibles were among my clients' best-performing securities.

I recommend a 20 percent allocation to high-dividend-income securities tied to the price of natural resources. Energy and other natural resources price increases were among the most significant economic events of 2005–6. Canadian oil and gas trusts (PWE, PVX, PWI, and ERF) were up 11 percent, on average, while also paying out double-digit dividends. Exposure to metallurgical coal, through Fording Canadian Coal (FDG), and to copper, through Southern Copper (PCU), offers similar

payouts and further diversification. Will the price increases in these raw materials continue? I don't know, but unless prices fall substantially, the dividend payouts alone make them worth holding through a downdraft.

I recommend a 20 percent allocation to special situations, situations that may or may not be high risk. These situation come about for a variety of reasons. Here are a few examples.

We are all aware of the emotional factors that enter into stock pricing. Journalists interview analysts, fund managers, or brokers to flesh out an article or video segment they may be doing about a company, an industry, or a market situation. What they get from such pundits is either an opinion (biased or sometimes even unbiased) or sound bytes (if you don't want to be edited out, make it brief and catchy). This process of creating news is flawed, mainly because the journalists may have no more than a passing knowledge of the subject they are trying to cover. Fewer still bother to get a second opinion or to verify that the first opinion was unbiased. The few who do make the effort often ask the person being interviewed for the names of other sources (like I'm going to share who they should *really* be talking to and lose my 15 minutes of fame!). The bottom line here is that this same emotional element exists with income securities because there are just as many nervous Nellies in fixed income as in stocks.

The beating up of GM since 2005 serves as a good example of the media driving values into the ground. For the media, there's nothing like predicting the inevitable bankruptcy of the largest car company in the world to sell advertising. It's a lot more exciting to predict this than to listen to a boring dissertation of all the steps that are being taken to turn GM around. The hype grew and grew as reporters tried to outdo one another, so that by year-end 2005, GM debt was trading at 60 cents on the dollar, well below the recovery one could reasonably expect from a GM bankruptcy. However, you can keep investors scared only so long before greed sets in. Once investors realized that GM is going to be around for a while, and once the nervous Nellies had dumped their positions, a more realistic valuation for GM debt issues prevailed.

Another recent example of special situations arose with closed-end income funds. The Federal Reserve in 2004 announced that it would increase the short-term borrowing rate by 25 basis points at every open

markets committee meeting until further notice. Closed-end income funds, which leverage their balance sheets with short-term borrowings, found that these rate increases eventually forced them to cut their dividends. This resulted in their share price moving from a premium over the net asset value (NAV) per share to a sizable discount. Such an outcome was fairly predictable, namely, that once the Fed stops raising short-term rates, the dividends of these funds are no longer subject to downward pressure, and the price will migrate back to NAV. This presents the opportunity for high yield as well as capital gain. More on this when we cover closed-end funds.

Retirement Planning

There is an unspoken conspiracy afoot to scare baby boomers into saving for their retirement. Most visible are government officials and media pundits who tell us that baby boomers are unprepared and likely to suffer dramatic reductions in their lifestyle once they retire from their day jobs. More subtle are the brokerage firms, mutual funds, financial planners, and so on with their handy-dandy online retirement planning guides that let you plug in your age, when you plan to retire, and what income you expect to need in retirement for the next 30 years. You may, of course, elect to die sooner, especially after you've taken your first cut at any of these retirement asset calculators, which invariably tell you how many millions of dollars you will need to ensure that you do not run out of money. *Most of this free retirement advice is designed to scare you into saving more (i.e., putting more money into your brokerage or mutual fund account where these advisors make their fees).* However, true retirement planning requires a little more introspection and a sharp pencil.

In order to test out one of these planning calculators, I indicated I was married, age 55, with $60,000 in savings, $150,000 in homeowner's equity, and $1,800 in expected monthly Social Security payments. (Note that I had to offer up my e-mail address to access this system, which means I have condemned myself to a nonstop flow of reminders for the next 12 years about how far behind I'm falling.) I used what I considered to be a fair monthly expense level of $5,000 and indicated that I

planned to leave no estate when my wife and I punched out. My only commitment to savings between now and age 67, when I could retire on full benefits, was $5,000 a year to my IRA account. After 30 seconds of what, per the site's description, was something close to rocket science, I was greeted with the results. Retire? Forget about it! I was going to need $1.2 million in savings by age 67 in order to have a 95 percent probability of reaching my goal. I also received the cheerful news that my proposed savings program gave me less than a 5 percent chance of reaching my goal. And that's based on my odds of winning the state lottery if I buy one ticket each month between now and retirement! No wonder people buy lottery tickets. You can save yourself the effort of using one of these asset calculators if you just multiply your first year's expected expense level by 25. You can also save yourself a lot of needless stressing since there is no real science to these calculations. Whatever you plan to spend per year above your various pension incomes times 25 is going to be the answer, more or less.

Real retirement planning is not just an asset counting exercise. There are five variables in retirement planning and they need to be considered jointly since all can be modified until you get the desired mix:

1. The age at which you want to retire
2. The lifestyle you plan to lead
3. How much in savings you can expect to have
4. What level of investment income you need
5. What level of risk you must assume to achieve that income

Most boomers probably are behind in accumulating a nest egg that will last them for up to 30 years of retirement and therefore may feel that only the stock market can help them catch up. If the past six years is any guide, and I think it is, that is a big risk. *The closer you get to retirement without sufficient savings, the less risk you can afford.*

Before trying to determine your retirement income needs, first take a realistic look at your and your spouse's life expectancy, health, and desired lifestyle. Take into consideration that after you pass age 70, your desire for traveling, living in a large house, maintaining a second house,

and buying new cars or new gadgets decreases. Hence, your actual cost of living, other than for health care, should decline. If your retirement income looks today as though it will not meet the lifestyle you envision, it is better to scale back your expectations or even postpone your retirement date than to pursue a high-risk investment plan that leaves you even fewer choices if it fails. Yes, we hate to contemplate scaling back, but hey, that's life.

In determining how much income you can look forward to upon retirement, first add up all your pensions. Consider whether to take Social Security at age 62 or delay until later and receive the higher payout, especially if you are in good health and your spouse is not, or vice versa. In determining your cost of living, factor in the lower income tax rate you will be paying once you retire and therefore the lower tax benefit you will have from a home mortgage interest deduction or from holding tax-exempt securities such as municipal bonds. Although your house is a good savings vehicle, that equity can be invested to return a 6 to 8 percent cash income if extra income is needed. Aside from this, the carrying cost of owning that house is probably a significant portion of your lifestyle expense.

Too many retirees have as a goal leaving an estate for their children. While this is a noble thought, it should always be secondary to planning for your needs. After all, *children should be motivated to strive to achieve their dreams, not to believe that an inheritance means they won't have to.*

Most of us contemplate a retirement free from the need to work. However, many find that part-time work gives them a reason to get up each day and brings more diverse social contact as well. They don't work just for the extra money, although that extra money can help; they do it because they want to. Leave yourself open for this possibility, especially with your current employer. Future opportunities for such work will only increase as the nation's workforce ages.

Investment-grade-rated debt securities today provide a steady 5 to 7 percent payout without stock market-like risks. Look for ways to improve your returns today in a steady, predictable manner *Sure, there may be more-exotic, higher-yielding stuff out there, but this is the stage in life to count your blessings, not test your luck.*

Investment Strategies

What's Exciting about 6 Percent Returns?

Those Wall Street types who have suffered enough to learn from the experience will advise any investor, no matter their age or wealth, to include fixed-income securities in their portfolio. In fact, they have made a game of it by recommending ratios of fixed income to equities and then periodically announcing shifts in such ratios. A common mantra is 60/30/10, which means having 60 percent of your investment capital in equity securities, 30 percent in fixed-income securities, and 10 percent in cash. As markets move, they announce new ratios (e.g., 70/20/10). What is often behind such ratio shifts, I suspect, is that a stock market rise has already brought the typical investor to a 70/20 relationship, so what they are really saying is, "Don't start selling stocks in order to get back to the previously recommended 60/30/10 relationship."

Those advocating portfolio balancing never fully explain why such a balancing approach is not just prudent, but is more profitable than an all-stock approach. Let me demonstrate this by example:

- Portfolio A has $100,000 invested, 100 percent in stocks.
- Portfolio B has $100,000 invested, 65 percent in stocks and 35 percent in bonds and preferreds yielding a constant 6 percent.

Scenario 1. Stocks appreciate 10 percent a year for four years, then drop 20 percent in year 5 due to an economic slowdown. Then for years 6 and 7, stocks resume their growth, appreciating 10 percent in each year. Fixed-income investments are assumed to remain steady in the first four years, then interest rates drop to an average yield of 5 percent during the economic slowdown, rising again to the 6 percent level in years 6 and 7. A key assumption here is that the Portfolio B investor adheres to the 65/35 fixed-income-to-equity ratio throughout the seven-year time period. Hence, at the end of years 1 through 4, when stocks are appreciating, he reallocates earnings from stocks to fixed income. (Note that the new breed of hybrid bonds and preferreds I expand on in this book are ideal for just such a strategy because they are exchange traded and come in $25 denominations). In year 5, when the value of the stocks falls, our investor reverses the allocation back into stock. Note that when interest rates fall, the price of fixed-income securities increases; in this case a drop in rates from 6 percent to 5 percent means fixed-income securities would be sold at about 17 percent more than their cost. See Table 1.1.

There are two reasons for Portfolio B's superior performance. The ability to reallocate assets from fixed income back into stocks when the stock market is depressed allows

Table 1.1
Why a Balanced Approach Matters

	Year-End Value		Ratio
	Portfolio A	*Portfolio B*	*A/B percent*
Year 1	110,000	108,600	+1.3
Year 2	121,000	117,939	+2.6
Year 3	133,100	128,082	+3.9
Year 4	146,410	139,097	+5.3
Year 5	117,128	131,836	–11.1
Year 6	128,840	136,864	–5.9
Year 7	141,725	148,635	–4.6

for a much more rapid recovery. This is because the Portfolio B investor has buying power derived from his fixed-income portfolio. In addition, he has suffered less of a loss because fixed-income investments tend to appreciate as interest rates fall, as they do in an economic slowdown. This is because a lower demand for credit as well as Federal Reserve policy will drive rates down.

A reallocation out of fixed income into stocks when interest rates are low is prudent, given that an economic and stock market recovery generally means interest rates will rise and fixed-income securities will decline in price. It should also be pointed out that making a shift in your portfolio from fixed income into equities in a year when stocks have dropped is probably also a good move for tax purposes. It reduces the buildup of future tax liability and allows you to take capital gains on fixed-income investments, gains that you had not counted on and that will disappear when rates rise. The ability to reduce your taxable income through a balanced strategy is an additional plus to your overall return that has not been factored into this comparison.

Scenario 2. Were the investor in Portfolio B more aggressive, he would change his asset allocation to, say 80/20 in year 5 to take advantage of the buying opportunity in stocks. His portfolio value at the end of year 7 would thus be even higher ($152,198 instead of $148,634).

Scenario 3. Should it turn out that the stock market did not recover for three years (e.g., the growth in years 6 and 7 was 0 percent) the difference in results at the end of year 7 would be dramatic. Portfolio A would be worth $117,128, versus $129,930 for Portfolio B, or an 11.7 percent difference.

In short, portfolio diversification recognizes the fact that stock markets go up and down in an unpredictable way. Through diversification investors have a means of taking advantage of downturns to minimize the long-term effect on their portfolio.

What's exciting about 6 percent? It's low-cost (no-cost?) principal protection insurance.

Diehard stock-only investors may argue with the assumption that a market correction will occur every seven years (as in this model) or that the stock market will grow an average of only 10 percent a year. If they are correct and no stock market correction occurs, then, in my scenario 1 example, they would be ahead in year 7 by $194,871 versus $171,306 for Portfolio B. Now then, how lucky do you feel?

As for the growth rate assumption for equities, stocks have had a long-term growth record in the 9 to 11 percent range for the past several decades. Their ability to sustain that rate in the future is probable, although assumptions that they can grow any faster are dubious.

You have to ask yourself, given your present age, how many 20 percent stock market drops can you recover from and still feel comfortable in retiring when you planned. The bear market of 2000 to 2002 was a wake-up call for many. While some may choose to abandon stocks altogether in favor of fixed-income securities, this is not the right solution for everyone.

Equities will always be an important investment tool, but two significant changes in the equity markets over the past 20 years will make stock markets much more volatile in the future. The first factor is the huge concentration of buy/sell decision making in the hands of less than 10,000 fund and asset managers. Added to this is the advent of electronic information services and the Internet, which makes news and information about individual companies and industries simultaneously available to all these market participants, often on a real-time basis. Today's market makers are individuals with similar backgrounds and experience (or lack thereof) using similar information tools and with a shared bias toward short-term results. If ever there were a reason to predict greater future stock market volatility, that is it. If ever there were a reason to keep a good share of your investment portfolio in fixed-income securities available to take advantage of future volatility, that is it.

Regarding use of a 6 percent rate of return for fixed-income investments in the preceding demonstration, I believe this to be quite conservative. I used it to demonstrate the soundness of an asset allocation strategy even at such low return levels. There is no reason an actively managed portfolio of fixed-income securities cannot earn 8 percent or more without taking on high risk. This can be done with the new breed of hybrid bonds and preferreds, which I address later. The goal of this book, then, is not just to sell you on my investment newsletter, but to give you the skills to build a portfolio with built-in protection against stock market declines and the opportunity to take advantage of market volatility in the stock markets as, and when, they are sure to occur.

What You Need to Know about Risk and Uncertainty

Ask 10 investors how they define *risk* and chances are you will get at least five different answers. In a recent prospectus for a new mutual fund I counted no fewer than 28 defined risks, and this did not include risks based on dishonesty, such as after-hours trading in fund shares, over-pricing infrequently traded holdings, or front-running (buying for your own account before making market-moving trades for your fund) fund purchases. The point is, while 28 different risks may exist, the degree of each fluctuates according to economic, political, or market conditions. The most common concern among investors is credit (payment) risk. That's why many investors buy only government-backed debt or FDIC-insured CDs. Yet today, when I rank the various risks by their likelihood, credit risk is quite low.

Think about it this way: Investment risk is a moving target that can be parsed into as many as 28 components. Taken to the extreme, each of these 28 risks can cause major short-term or long-term damage to your portfolio. The challenge for investors is in identifying which risks are currently the highest and whether they should or should not react to them. For example, if credit risk were suddenly a great concern, everyone would likely react. However, if the risk is one of interest rates rising, not all investors would react. Income investors with portfolios wouldn't be concerned because their income remains the same and so does their principal maturity value. On the other hand, investors seeking growth and income would despair, because the market value of their holdings would contract.

Looking to the future, I see the following risks as high: interest rate risk, industry-specific risks (e.g., mortgage REITS, financial institutions), political risk (e.g., due to elections and Fed policy), financial system risk (e.g., related to derivatives and currency issues), market disruption risk (e.g., terrorism-related), and inflation risk. This is even more complicated when you consider that the risk result can appear to be positive or negative, and the consequences can be predictable (e.g., interest rates rise and bond prices fall) or contrary (e.g., control of Congress changes hands, leaving uncertainty and stock prices rise!). It is precisely because risks come in such varieties that forecasting accuracy is so poor.

Subjective Risks

Risk is one of those words like *love*, *hate*, *fear*, and *dread*; in short, a word that often has a different meanings to speakers than to their listeners. In investments, it is a word with a very personal definition, shaped by a person's experience, much like an acquired taste. One of the principal tasks of an investment advisor is to gauge an investor's tolerance for risk, both perceived and actual. Needless to say, it would behoove investors to make this determination on their own, beforehand, since it will determine what kind of advice they should seek in the first place.

Risk is subjective in that it is defined by your personal tolerances, but it is also objective as it pertains to the actual selection of investments. Looked at from its subjective aspect, it is a phrase that encompasses two emotions that drive individuals: fear and greed. The emotional element of risk is strictly personal, and you need to give serious thought to your own tolerance for risk because it is unique to you. No one can tell you which investments will make you comfortable, nor is your level of comfort the same all the time. As you get older and as your economic wealth rises or shrinks, your comfort level will change. The two ways you define your comfort level in investments is through your portfolio balance and through your quality selection. Quality selection for fixed income is generally defined by bond ratings, a subject addressed later in the chapter under "Credit Ratings."

Greed has gotten a bad rap throughout history, but like it or not, it is the driving force behind capitalism. It is not as portrayed in the movie *Wall Street* by the line "Greed is good," but think of it instead as unavoidable. *The main emotion a smart investor should have is fear*. Fear is the emotion you must overcome to invest when opportunities appear risky but usually are at their best. Fear is also the emotion you need to consciously recall when things are going really well and seem to have no end. Greed is the emotion you must always work to keep in check. It clouds judgment and is sustained by rationalization. It therefore depends mainly on luck for its outcome. Both fear and greed can skew your investment discipline and must be kept in check.

It is the ability to quantify risk with reliable and comparative yardsticks that gives fixed-income investments a degree of comfort not found

with equity securities. Ratings provide the investor with a grading system of a company that has proven to be highly reliable over time. Credit ratings break down broadly into investment-grade and non-investment-grade categories, which are then further refined to show relative risk and, through rating changes, whether that risk is rising or falling over time. Interest rate risk is also a highly quantifiable risk, which can be managed in several ways, as I explain later. While few people can predict the direction interest rates will move, the good news is that the rates move slowly. Therefore, you can use both time and technique to minimize the damage.

Objective Risks

As with equities, there is an element of unquantifiable risks with fixed income, albeit these risks are significantly less. There is *market risk*, which is the inability to sell a security quickly or at a reasonable price. This varies according to the type of security. For example, municipal bonds that are not AAA insured can be difficult to sell quickly at a reasonable price if it is not a well-known issue or if you have less than a $25,000 lot to sell. This is because, with munis, brokers who want to buy lots of less than $100,000 are few, and they will demand a sizable discount to do the trade. Corporate bonds face a similar problem.

Fixed-income securities also face periodic flights to quality. This *flight to quality risk* is when uncertainty causes the fixed-income investors to suddenly sell lower-quality bonds and buy higher-investment-grade issues. Such a flight to quality took place when the first Gulf War started in 1991. Once the initial crisis passed, values drifted back to normal relationships. Hence, these flights matter only if you need to sell; they represent an opportunity if you are buying.

Another risk that has received prominent attention recently is what is graciously termed *accounting risk,* although it has always been around under the more familiar term, *fraud*. Modern innovations in finance and accounting have managed to create a huge gray area wherein "creative accounting" becomes difficult to distinguish from fraud. While recently implemented penalties have made it more onerous for company executives to engage in blatant misstatements, the problem will always be just

under the surface. *Fraud and securities are so closely linked because it is one of the easiest and most lucrative crimes to commit.* Securities represent the exchange of money for a promise. The only skill required by the thief is an ability to talk convincingly and be brazen. With careful execution, the perpetrators can even come up with a convincing exit strategy that leaves investors thinking that the failure was not predestined. Don't get me wrong, the vast majority of business failures are honest failures, even if the accounting was manipulated along the way to stave off the inevitable.

Often, careful analysis will uncover accounting risk; however, markets tend to take a dim view of misstatement disclosures and rating agencies, and the SEC takes an even dimmer view. Thus the erosion in the price of a company's securities when misstatements are disclosed can be severe. The only good thing that can be said here is that price erosion in fixed-income securities is much lower, and their recovery much swifter, than for common stocks.

Uncertainty

Added to risk is uncertainty (i.e., the disruptions that can't be anticipated, such as floods, earthquakes, hurricanes, pandemics, assassinations, and wars). In fact, no less an American icon than General Electric picked as the cover theme of its 2003 annual report, "Growing in an Uncertain World." The distinguishing feature of uncertainty is that when such disruptions occur, the market consequences cannot readily be identified or quantified, not to mention the immediate knee-jerk reactions, which in themselves create short-term investment opportunities or losses.

The one idea to take away from this discourse is that in investing, very little is highly predictable and nothing is certain. Don't put too much reliance into any forecast or too much money into any one investment, or even into a single asset class. Sure, we all read stories about the investor who bet it all on a company or idea and made a fortune. No one writes about the 99 other investors who did the same and were wiped out. Why is that, I wonder? Uncertainty in investing will always

exist, especially the negative kind, but through proper diversification, its long-term effects can be considerably reduced.

Understanding Interest Rates: General Features

Interest is a convenient way to characterize what to a borrower is the cost of money and to a lender is the time value of money. It is one of the simplest concepts to understand and one of the most complex to implement. It has been around since biblical times and has been maligned to the point of being criminalized. Those who lend money have historically been looked down on and even persecuted, except when their services were needed by the king or another ruler of the day. Today interest is recognized as the lifeblood of the capitalist system. It is the motivation for those who have money they don't currently need to lend it to those who do. Those who lend money (versus investing it in, say, equities) are showing a preference not to participate in the risks of the borrowing enterprise. Of course, all risk cannot be avoided, but as a lender, their risk is limited by virtue of the fact, written into law, that they have first claim to any assets still remaining should the enterprise fail.

Practically everyone understands interest as being the cost of borrowing money. How much this cost will be depends on (1) what is being financed, (2) how it will be repaid, (3) the length of the loan period, (4) the tax treatment of the income, (5) the prevailing cost of money at that point in time, (6) the conditions of repayment, and (7) the currency of payment. These seven variables allow for an infinite number of ways to structure an interest-paying security. They also make comparisons quite complex. Still, quantifiable comparisons are possible, which is more than can be said for most common stocks.

Before I go into these seven aspects of interest, an investor needs to become familiar with certain terms. The list of terms used is extensive, but I mention here only those that are absolutely essential:

Yield. This term refers to how much interest a security will earn for you. It is a number expressed as a percentage, so that it can be readily compared to all other securities and so that it is the same number no matter how much

you are investing. You may also see it referred to by another term: *rate of return*. For example, an 8 percent bond pays $80 a year interest on its $1,000 face value, but its yield to you is only 8 percent if that is what you paid for it. If you paid $900 for the bond you still get the same $80 a year interest payment, but your yield would be 8.88 percent rather than 8.00 percent ($80/$900). Likewise, if the bond sold for $1,100, your yield would drop to 7.27 percent ($80/1100). *Current yield* or *current rate of return* are other terms you will see used to describe this same amount. You may ask, why does the price of a bond change if its quality remains unchanged? The answer is that securities' market prices reflect the prevailing rates of interest that day. The prevailing rate is what a bond issuer would have to pay today to sell new bonds. If that rate is 8.88 percent, a new bond would come out as an 8.88 percent bond paying annual interest of $88.80 per $1,000 bond. However, since the 8 percent bond will still be outstanding and has a fixed payment of only $80, the price adjusts downward to $900 to put it on an equal footing with the new bond. Unless this happens, no one would buy the 8 percent bond, so it would become illiquid.

Yield to Maturity. Now that you understand yield, its time to complicate things further. Yield to maturity refers to how much a security will earn for you if you hold it to its maturity date. Using the preceding example, if you bought the 8 percent bond for $1,000, the yield and the yield to maturity would both be 8 percent. However, if you bought it for $900, you will be entitled to an additional $100 payment over your cost at maturity. This additional payment is income that needs to be expressed in a percentage form (again, so the security can be compared to all other bonds), but it needs to have a different defining term, since this additional $100 yield is paid only at maturity. The yield to maturity is more complex to calculate, but you don't need to do it, because yield to maturity should be disclosed to you as part of the price quote before you buy. In our example, assume the 8 percent bond has 10 more years to maturity. In that case, if you paid $900 for it, your yield to maturity is 9.64 percent. If you paid $1,100, you will actually lose $100 of your purchase price at maturity, so the yield to maturity is less than the current yield, or 6.54 percent. Note that you don't have to wait until the last year to realize the additional $100 payment (or $100 loss). This is because, as the maturity date approaches, the current price of the bond

rises or falls to keep the yield to maturity fairly constant. Two other yield calculations you should also ask for before you buy are the *yield to call*, which is what your yield would be if the issue is called at the next call date, and the *yield to worst*, which is the yield if the security is paid off at the worst possible time for you.

Yield to Call. This is the yield a security will give over its remaining life, assuming it is called at the next call date and price.

Yield to Worst. This is the yield a security will give assuming the worst maturity and call price combination for the buyer.

Maturity Date. This is the future date when the face amount of the bond or preferred will be redeemed or paid in cash.

Call Date. This is the date prior to maturity when the company may redeem a security early. A corporation will usually call a security early because interest rates have declined from what it is paying, allowing it to refinance the debt at lower rates. This right to call a security early, however, may come with a penalty to the company, called the *call premium*. Such a call premium may be 5 percent above face value, meaning the company in our example would pay a bondholder $1,050 if it calls the bond, say, five years early. Call dates generally run the life of the security, with a diminishing premium at each call date as you get closer to the maturity date. This list of call dates and prices is called the *call schedule*. Note, there are no hard-and-fast rules about call dates and call premiums, so you need to thoroughly understand them before you buy a security, because they can greatly influence the fairness of the asking price. For example, a security can have a tempting 9 percent current yield, but be callable in six months, in which case the yield becomes a negative 1 percent!

Preferreds. Preferred securities, often termed *preferred stocks*, make their payments as dividends. This is true despite the fact that they are fixed-payment securities. Many of today's preferreds are actually bonds. This is a market convenience that can cause confusion with the more familiar concept of the dividend payments on common stock, which are discretionary. The various types and features of preferreds are discussed in detail in Chapter 4.

Now that you know these basic terms, its time to address the variables that affect the structure of interest paying securities.

Variable 1: What Is Being Financed

Over time, different borrowing needs have developed mass markets of buyers and sellers, and this in turn affects overall interest rates. Three prominent markets are the U.S government debt market, the mortgage debt market, and the commercial paper market. These are all highly liquid markets selling debt instruments with negligible credit risk. The buyers are mostly institutions that value liquidity and low risk and therefore accept a lower rate of return than they could earn on debt instruments that would require subjective evaluation. This is not to say that these markets are no-brainers. You still have to compare and value the maturity and redemption or call features from among these securities. However, such choices are more like picking the color and upholstery on a car once you have decided on the model.

Aside from these three very large markets exists an informal, or over-the-counter (OTC), market for a variety of other fixed-income securities composed mostly of corporate bonds and various derivative instruments such as collateralized mortgage obligations (CMOs) or collateralized debt obligations (CDOs). These securities are not homogenous except for the features they are required to have by law. Most important, they vary hugely in their rate of return. As a convenience to those who make the markets in these securities, they break down into investment-grade and non-investment-grade, commonly referred to as *junk bonds*. Don't be put off by the denigrating term *junk bonds*, whose stigma is undeserved, especially considering that these can easily add 2 to 4 percentage points or more to your yield.

Variable 2: How It Will Be Paid

Interest payments can be monthly, quarterly, semiannually, annually, or not at all. As a rule of thumb, bonds pay interest semiannually and preferreds pay interest/dividends quarterly. The variety in payment features, however, is generally provided to appeal to the different purposes of buyers. *One major difference between bonds and preferreds is that when you buy a bond, you pay the agreed purchase price plus the amount of the next cash interest payment that has accrued up to the trade date.* If a bond's next interest payment will be $40, and three months of the

six-month payment period have passed, you would have to pay an additional $20, above the price being quoted, to the bond seller. With preferreds, this is not the case. Preferred interest/dividends belong wholly to whoever owns the security on the last day before the *ex-dividend date*, which is a date set by the stock exchange to determine who gets the payment. On preferreds, the market value is expected to, and usually does, adjust to reflect the change in the value of the security the day after it's no longer eligible for the dividend.

When I say that sometimes interest is not paid at all, I am referring to what are termed *zero-coupon bonds*. These are bonds sold at a discount to their face value. In effect, you receive only one payment at maturity, generally the face amount of the security, that represents your purchase price and all the interest on that price and interest on the interest you would have received if interest had been paid semiannually and then reinvested.

Another unusual interest payment feature is an *original-issue discount bond*, or OID bond, which comes about in one of two ways: It can represent the discount at which a bond was sold at the time of original issue (e.g., a $1,000 bond that is sold for $950 when issued). It can also be a bond that pays no cash interest for the first year or more. The purpose in this arrangement is to give the borrower time to employ the bond issue proceeds for their intended purpose and begin to generate the income needed to make cash interest payments. Here again, the purchase price is something less than face value in order to compensate the buyer fairly. Such bonds often originate as part of a bankruptcy settlement.

Some securities, termed *convertible bonds*, or *convertible preferreds*, are issued with a stated rate of interest and maturity, but are never intended to be redeemed. Such securities have a redemption clause that provides for the holder to be paid in common stock or cash when the bonds mature or are called. Such redemption may be at the option of the seller or the buyer. More on this in Chapter 5.

Finally we have securities that pay interest by issuing the holder more of the same security, commonly called *pay-in-kind (PIK) securities*. Such securities are generally issued by companies with very low credit ratings, or they may have been issued as part of a previous distress

situation such as a bankruptcy settlement. The pay provisions generally allow the issuer to pay in cash or in kind for a defined period of time, according to that issuer's financial fortunes.

Variable 3: The Length of the Loan Period

The length of time a security has between its issue and its date of maturity affects both its rate of return and its price volatility. This is because the greatest cause of interest rate fluctuation is inflation. Inflation has historically been difficult to predict and has been financially devastating several times in history. A security with a far-off maturity date traditionally yields a higher rate of return than one with only a short maturity. The relative relationship of security yields over time is expressed by a graphic called the *yield curve*.

During times of low inflation, this yield curve will be almost flat, while during times of great concern it will become quite steep. During periods of changing expectations regarding inflation, the curve can even become inverted (i.e., short-term rates are higher than long-term rates). This yield curve graphic is like a weather barometer, forecasting change the more it varies from its traditional slope. (This is because short-term rates will react much more quickly to economic change than long-term rates.)

Although inflation is hard to predict, its effect on the price of a given security is not. The tool that the fixed-income markets use to measure this effect is called *duration*. The concept of duration is explained in detail in Chapter 3. The reason you want to understand duration is that while interest rate movements are hard to forecast precisely, the direction of change is generally slow and lasts over an extended period of time. Hence, if interest rates are predicted to rise in the foreseeable future, you should look toward buying securities that will decline less in price. Likewise, when rates are high, look for longer-maturity securities, because they will likely appreciate when rates fall. Note, however, that if you buy a fixed-income security with the intention of holding it to its maturity, you need have little concern about which way interest rates are going or their effect on the price of your security. This is because at maturity, you will get the face or par value in cash no matter what happens in between.

Variable 4: Tax Treatment

Coupon rates, or rates of return, are directly affected by how the recipient of the payments is taxed. Generally speaking, all interest in the United States is subject to federal, state, and local income taxes. That being said, let's address the more notable exceptions. Debt issued by the federal government is exempt from state and local taxes. This includes Treasury bills, notes, and bonds and federal agency debt. Debt issued by municipalities is exempt from federal income taxes and from state and local taxes if held by residents of that state. This exemption from federal tax is limited in its total amount and is not true for all municipal debt. Likewise, municipal debt interest on a New Jersey bond does not help a New York city resident with his or her state and city income taxes. This is why the municipal bond market is very regional. Investors need to ask the seller of any municipal bond purchase about its specific tax limitations as a matter of routine, since it has a direct effect on its price and its value to them individually. For more on this subject see Chapter 3 in the sections on municipal bonds.

Interest does not have to be paid in order to give rise to a tax liability. For example, zero-coupon debt has an imputed interest rate even though no payment is received until the year of maturity. The annual imputed interest must be reported as taxable income for each year the bond is held, despite the lack of any actual payment.

Variable 5: The Cost of Money

Various studies that have been done on the cost of money through the centuries have concluded that before factoring in inflation and the other variables, real returns have averaged between 2 and 3 percent. I am personally puzzled by how anyone can make this determination, as some claim, over a period of 1,000 years. Nevertheless, it has become an accepted convention to assume the cost of money is 2 to 3 percent and then attribute all the rest to assorted variables. In fact, there may be a current precedent for this convention in the form of U.S. Treasury Indexed Performance Securities, or TIPS. These securities are as good as it gets, quality-wise, and fully adjust for U.S. inflation. Their yield fluctuates in a 2 to 3 percent range. Fluctuations in their yield can therefore be seen as a barometer of interest rates in the future.

While in theory the cost of money is determined by the free market, the Federal Reserve Bank, in the name of economic stability, is the visible hand that helps the market make its decisions. It does this by controlling the short-term cost of money through its power to set the rate at which banks can borrow from it and through control over the supply of money and credit. The Fed controls the supply of money through buying and selling U.S. Treasury debt and through setting the banks' reserve requirements, which determines the amounts available for lending by member banks. Note that this rate setting and credit supply management only indirectly affect the market of greatest interest to investors, the fixed-income securities markets that are driven by long-term rates. Here the free market still operates, although it shows a healthy respect for the message the Fed sends out with each short-term rate change. Likewise, the Fed pays close attention to what the long-term markets are saying by their rate movement. In short, you can never be sure when the Fed is going to lead the way and when it's following the markets.

While this management of short-term rates by the Fed may not sound like much, it has proven to be the principal tool available to the government in managing our economic growth. For this reason, the actions by the Fed and the pronouncements by its chairman are closely followed by market participants. It is also why every attempt has been made to insulate the Fed from politics by appointing its governors to nonconcurrent 14-year terms. The Fed reports to Congress, but Congress doesn't set its agenda. It's not a perfect system for economic management, and it's still highly dependent on the skills of those in charge, but few would advocate its demise.

Variable 6: The Conditions of Repayment

The most complicated aspects of fixed-income securities are often the repayment provisions. When you are lending money to the U.S. Treasury, there is little concern about repayment provisions, because you have the confidence that the United States as an entity will outlive you. Not so for any other borrower. The repayment provisions are quantified in the call schedule. As stated in my definition of the call date, most bonds make provision for the early redemption of the security. Such provisions are designed to provide the borrower with an opportunity to

retire the debt early should interest rates or other fortuitous circumstances make this advantageous. Aside from this, many fixed-income securities are backed by a revenue stream that is not wholly predictable (e.g., mortgage-backed securities). In these cases, there may be a provision for earlier repayment because the underlying mortgages were repaid early. Bonds may also have sinking fund provisions, whereby monies are deposited periodically with the bond trustee for the redemption of the bonds. Bonds are then redeemed piecemeal based on a pro rata or random selection process. Generally, this is done by random selection of serial numbers. On rare occasions, issuers may choose to pay, say, $80, on each $1,000 bond, leaving the holder with a $920 par value bond, which now may be a little hard to sell.

Securities generally provide for early repayment upon the occurrence of some event that changes the ownership or nature of the business. Such provisions may be for the protection of the lenders, but may also work against them if the issuer is acquired by an investment grade company who calls the security because it can borrow at lower interest rates.

Variable 7: The Currency of Payment

Fixed-income markets have become truly international in scope, so a caution about currency of payment as well as the nationality of the borrower is in order. Bonds denominated in other than U.S. dollars include a variable that the investor must also consider. Bonds denominated in a foreign currency are quoted with yields that assume no change in exchange rates between now and the maturity date. This can be misleading, given that a currency play would be one reason the investor chooses to buy a bond denominated in another currency. The yields on foreign currency—denominated debt will reflect the anticipation that further currency appreciation or depreciation may occur. The advent of the euro has created a huge market of securities in a currency that should prove to rival the dollar over time. Recent strength in this currency means that investors receiving, say, a 5 percent interest yield would also have a security that has appreciated 7 percent in price due to the appreciation of the euro against the U.S. dollar. Such currency aspects introduce a wholly different risk, as well as a profit opportunity, that needs to be evaluated.

Recent events in Argentina also point out that the risks associated with the nationality of the issuer are a consideration. Although a company based in Argentina borrows U.S. dollars, it is doing business in Argentina, in pesos, and is subject to the remittance rules of that country. A financial crisis in that country can lead to a suspension of foreign exchange remittances, including interest payments on the borrowings of the country itself. Ironically, companies that were financially capable of making interest and principal payments were prevented from doing so because of these currency restrictions, and their debt was also declared in default.

Summing Up

Figure 1.1 demonstrates that since 1981, when long-term rates in the United States hit a peak of 14 percent with inflation of 12 percent, interest rates have been on an unprecedented 25-year decline. During this time, investors were able to earn huge real interest returns as well as capital appreciation on securities as safe as long-term U.S. Treasuries. This decline to a present level in the 4 to 5 percent range is pretty much at an end now, and rates should stay relatively benign for the foreseeable future. This means that the days of 7 and 8 percent rates of return on riskless Treasuries is at an end for the expected lifetime of investors

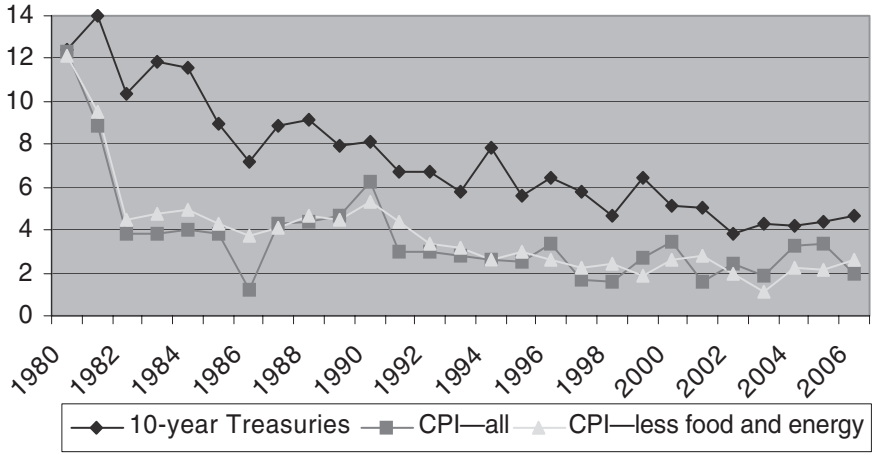

Figure 1.1
Inflation versus 10-Year Treasuries, Annual Percentages

over 50 years old. *Building a nest egg for the next 25 years at more than a 4 percent compounded rate of return will therefore require an investor to look at alternative instruments, strategies, and risks.*

Compound Interest

If you are saving for your retirement through income securities, you need to become familiar with the concept of compound interest. Einstein is famously quoted as saying that compound interest is the most powerful force on earth, relatively speaking. The past five years have certainly demonstrated this, in spades. To understand what compounding can do for you, start with Table 1.2.

Great, now how do you double your money? By compounding! The secret of compounding is time and interest rates. As shown in Table 1.2, $100,000 must double three times in order to make about $1 million nest egg, but how long will that take?

Even in the present environment of low interest rates, a 7 percent yield is available in corporate bonds and preferred stocks. At this rate it will double in 10 years, double again in the twenty-first year and reach $1 million in 34 years. Another approach would be starting with nothing and saving $10,000 a year from your current income. To reach $1 million in this instance would take 31.5 years. Okay, let's say you can't save more than the $4,000 that the IRS allows you to put in an IRA ($5,000 if you're age 50 or older). Even this amount of savings per year, compounded at 7 percent, can grow to $23,000 in 5 years, $55,000 in 10 years, $164,000 in 20 years, and $253,000 in 25 years. Not bad growth considering the IRS is giving you a free ride to save at least that much.

Table 1.2
How to Become a Millionaire

Starting Amount	*Number of Doublings Required to Reach $1 million*
$1,000	10
$10,000	7
$100,000	3 plus a little

For me, building a nest egg by relying on interest rate compounding is more satisfying than investing in common stocks, where your main satisfaction is selling what you hold, when you so choose, for more than you paid. This is infinitely more risky because your timing has to be right when you buy the stock as well as when you sell it. This means you must be right about the company's prospects and right about the market in general. These same risks exist in fixed-income investing, but to a much lesser degree.

Fixed-income investors are no different than equity investors in their ultimate goal: to build wealth and make the most profit they can. The principal difference is in how ready they are to risk their capital to achieve that end. I know from dealing with numerous investment advisory clients that there is also an underlying "animal" spirit in many of them. Few are content to settle for the returns promised by our model portfolios. They want to have some fun. Well, *investing is about making money, and Las Vegas is about having fun.* But, if Las Vegas is not your bag, or you are between trips, at least discipline your urge to make the stock market your casino. Mentally set aside, say, 5 percent of your capital for taking flyers. If they pay off, you've satisfied your urge; if not, you can shrug it off. In any case, you haven't killed your total return for the year as have those who have invested 100 percent in stocks the past five years.

When Interest Rates Rise

When interest rates begin to rise, the market reaction can be sudden and sharp. Worse yet, the decline in prices is likely to continue for a while. The question you may ask yourself is, "What should I do?" The answer to this question depends greatly on why you bought your fixed-income securities. If you bought them for their cash income, the answer is to do nothing. While the monthly brokerage account valuations may rise or fall, your monthly income will not change. Likewise, if you are a buy and hold investor, your eventual return of capital from a maturing security or one with an early call will not change. But if you need to protect against any erosion in the value of your portfolio, then you have a number of options. If the rising rate threat is during a time when the yield

curve is fairly flat (i.e., short-term rates are about the same as long-term rates), then you can simply opt to sell your longer-maturity investments and park the funds in a CD, Treasury bills, or a money market fund. The advantage here is that if a rate increase comes quickly, you avoid the initial hit to your account and can then reinvest the money parked on the sidelines at the new, higher interest rates and actually get higher cash income than before. To help you determine which securities to sell, go to Chapter 3, the section on "Duration."

A second question you may ask when rates are rising is, "Where do I put new money?" There are several choices here: adjustable-rate securities, convertibles, and securities likely to be called.

Adjustable-rate securities pay a rate of return that is adjusted periodically based on some cost-of-living index or a short-term interest rate such as the London Interbank Offered Rate (LIBOR). Such securities pay a rate that may be adjusted anywhere from monthly to as long as five years. They generally feature a minimum and a maximum rate within which they can vary. They also may come with an initial coupon rate that looks irresistible as a sweetener to get you to buy them without reading the fine print. But *do* read the fine print. Such sweetener issues can be very misleading and may actually lock you into a below-market interest rate after the initial two or three years, much like some of the adjustable rate home mortgages currently being peddled. Make sure the reset provisions of any security being considered will keep the price near its par value and that the reset schedule is at least quarterly. If it's only once a year, the price should be lower than for one that resets four times a year. Also look at the floor and ceiling reset limits. If the issue has been outstanding for a few years, there's a good chance the current reset price is well below the floor price for the issue. What's wrong with that, you say? It means that the interest rate will have to rise by several rate resets before it rises above the floor and you see your first payout increase. That may be one or two percentage points away, or as much as you are likely to see rates rise in the current low-interest-rate environment.

I also recommend buying convertibles as a way to protect against rate rises, since the conversion feature provides downside protection and provides possible upside gain should the underlying stock rise. That's not uncommon, given that interest rates can also rise because stock

prices are strong, thereby drawing capital away from income securities forcing yields up.

Another alternative to buying short maturities when yields are low is to look for bonds and preferreds that are likely to be called in the next year or two. Such issues may provide more yield than comparable issues that definitely mature in the next few years. Note that in evaluating such issues you need to know the yield to call rather than the current yield, which is generally higher. Buy only those priced at or below the call price. Often, such issues are not called at the earliest call date. In such a case, the rate of return going forward is generally better than what you could have gotten at the time from having to reinvest your call proceeds. This is because the securities were priced on the assumption they would be called away, hence any additional time beyond the call date is a bonus yield.

Investment Strategies

Comparative Yields Explained

For years I have published a monthly "Comparative Current Market Yields" table in the *Forbes/Lehmann Income Securities Investor Newsletter* to demonstrate the diversity of yields and instruments that investors need to be aware of in selecting various income securities. Too many investors embrace the concept of buying investment-grade securities as if it were a model of prudence, ignoring the fact that default risk is only one (and a minor one at that) of the factors they need to consider in making an investment choice.

Our newsletter table uses the yield on 10-year Treasuries as the benchmark interest rate and compares it to the rates for other popular instruments via the spread columns. Spread is stated in basis points, where 100 basis points equals 1 percent in yield. The 10-year Treasury is used as the benchmark because it is the most liquid security in the world and is free of default or call risk. This does not mean, however, that the difference between it and all other rates represents default risk. This is because many of the buyers of Treasuries are foreign central banks that don't buy corporate bonds. Their yardstick for comparison is something closer to the 10-year euro bonds, also quoted in the table, and currently yielding below Treasuries. These investors want a higher return on Treasuries because of a perceived currency risk in dollar-denominated debt. If the dollar begins to show sustained appreciation, vis-à-vis the euro spot rate, you will see this relationship reverse. The table also quotes the return on inflation-protected Treasuries (TIPS) since the yield difference (spread) between them and straight Treasuries is a

proxy for how high a rate of inflation the market is expecting. As you can see in Table 1.3, as of December 31, 2006, the spread between the 10-year and the inflation-adjusted Treasuries stood at 230 basis points, which implies that investors think inflation will be 2.30 percent, from 2.34 percent at the beginning of the year.

Moving down the table, you will note the various quality levels of corporate bonds. Note here how the investment-grade issues closely track (see the Net Change column) the change in the 10-year Treasuries, but the below-investment-grade issues do not. This is because below-investment-grade issues are driven more by perceptions of credit and liquidity risks than by inflation concerns. In Table 1.3, the spreads for investment grade issues are fairly constant year to year. Not so for the below-investment-grade issues, where spreads have narrowed as default concerns wane. The danger here is that investors in below-investment-grade bonds are not of the buy and hold school of investment. They will cut and run if they see a downturn or better opportunities elsewhere.

Preferred yields are significantly higher than comparable bonds despite the fact that most of them are actually bonds held in trust. This is due to a variety of factors, the principal one being that large institutions ignore this market because they cannot make purchases in large quantities. These securities are ideal for individual investors making small purchases, especially given the better yield and pricing visibility, since most issues are exchange traded. The table breaks out yield returns for preferreds eligible for the 15 percent tax treatment. I consider these securities an attractive alternative to municipal bonds because of their liquidity and higher pretax and after-tax yields. When interest rates are low, muni yields are so low that they provide little return after allowing for inflation. Also, having some tax liability provides opportunity to offset tax-deductible losses elsewhere.

The municipal rates listed feature the yield spreads from Treasuries expressed as a percentage. This percentage subtracted from 100 is roughly the marginal tax rate you are paying to make munis attractive. As this percentage rises, the benefit of tax-free income rises. Keep in mind, however, that the assumption in all these comparisons is that you would invest in Treasuries if you did not buy munis. If, however, you would consider investment-grade 15 percent taxable qualified dividend income (QDI) preferreds as an alternative to BBB munis, the yield percentage would increase to 110 percent, versus 97 percent for munis, a clear after-tax advantage for preferreds. See Table 1.3.

For readers who are more comfortable with graphics, Figure 1.2 shows, in a graphic explanation of comparative yield, how corporate bond rates have fluctuated since 2000. Note how the gaps between rating qualities widen and shrink for below-investment-grade categories. I do not show a yield for AAA bonds because there are so few issues. It seems that in order to get a AAA rating, you have to be strong enough not to need any borrowings.

The preferred yields (Figure 1.3) demonstrate how yields have come down since 2000. Note the comparative differences between the yields by rating category in Figures 1.2 and 1.3. Since most of the preferreds in Table 1.3 are also debt issues, this illustrates the absolute yield advantage for preferreds over bonds, in addition to the yield differential by rating category.

Table 1.3
Comparative Current Market Yields
(Net Changes and Spreads in Basis Points)

Rating	*Yields*	*Net Change*	*Net Change*	*Spread*	*Spread*
Category	12/31/06	Month	YTD	12/31/05	12/31/06
U.S. TREASURIES AND EURO BENCHMARKS					
10-year	4.70	24	31		
Inflation indexed	2.40	25	35	–234	–230
10-year euro[1]	3.94	25	64	–109	–76
Euro spot rate	1.320	–29	1152		
Corporate Bonds[2]					
AAA	5.36	21	31	66	66
A	5.63	21	33	91	93
BBB	5.99	22	13	147	129
BB	6.83	–5	–49	293	213
B	7.91	–13	–32	384	321
CCC	10.24	–27	–188	773	554
Preferreds[3]					
AA and A	6.36	–2	–25	192	166
BBB	7.22	29	–27	310	252
BB	8.08	–19	–83	452	338
B	8.84	–19	–140	585	414
QDI Preferreds[4]			Yields	Yields	
Invstment.grade	5.69	–11	–23	115 percent	103 percent
Below inv. grade	6.42	20	41	116 percent	116 percent
MUNICIPAL BONDS[5]			Yields	Yields	
AAA (insured)	3.79	11	–10	89 percent	81 percent
A	4.16	3	5	94 percent	89 percent
BBB	4.28	3	–16	101 percent	91 percent

1. Rate for 10-year German government bonds.
2. Per Merrill Lynch bond index by rating.
3. Per Income Securities Investor Index by rating.
4. Eligible for 15 percent tax rate. Yields shown at after-tax percent of U.S. Treasuries rate.
5. Per Bloomberg. Yields shown at after-tax percent of U.S. Treasuries rate.

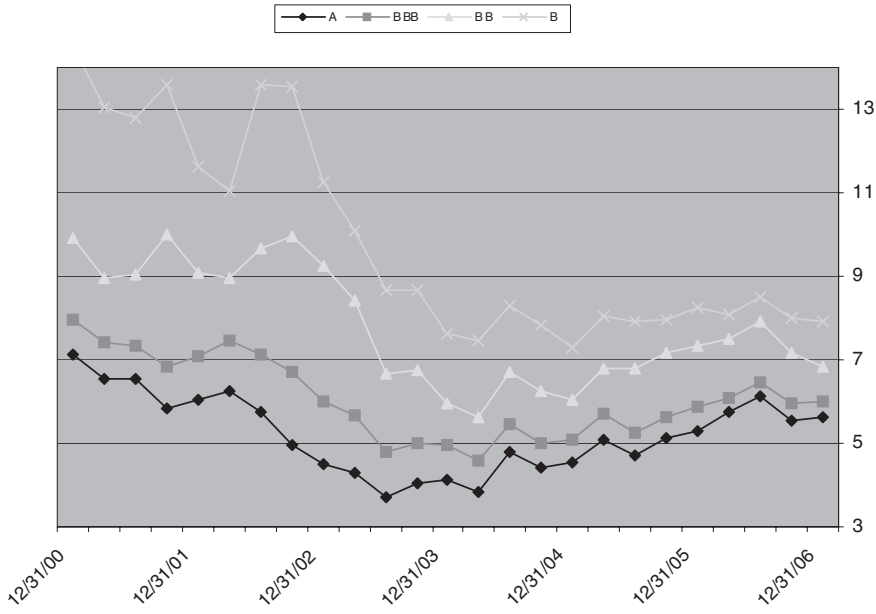

Figure 1.2
Corporate Bond Yields

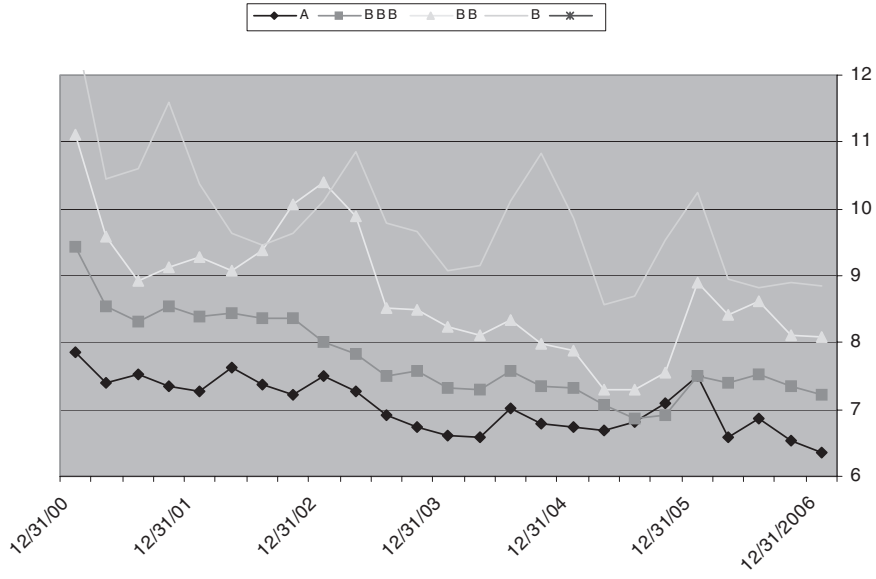

Figure 1.3
Preferred Yields

What to Pay: Fair Value Pricing

One area in which income securities have equities beat cold is pricing, or I should say *fair value pricing*. A stock that has never paid a dividend and makes no promises it will ever pay a dividend is a pretty subjective thing to price. Its price is based on such factors as how many analysts follow it, how well they are wined and dined, how good a job the company does on PR, how well known its products are, how hot its industry is currently perceived, and how much money it makes, even if it doesn't share any of it with its shareholders.

Income investors have it much easier. They couldn't care less what the company makes (unless they are environmentally, politically, or ethnically sensitive). For them, the right price is how much a comparably rated security with the same yield, maturity, and call features is priced. And since prices generally move quite slowly, last week's or yesterday's price is as good a benchmark as they need. This is why you will see numerous yield indexes published on a daily basis. Most such indexes key off the 10-year U.S. Treasury rate, although this is becoming more problematic given the vast audience of overseas buyers for this particular security. We assist our newsletter readers in this regard by publishing monthly a "Comparative Current Yields" table (used in the preceding example), which shows the yield spreads between the benchmark Treasury securities and the various alternative instruments. This provides an investor with a rough starting point for evaluating the offering price of a security he or she is considering. Factor in the rating, call features, maturity differences, and accrued interest, and you have a pretty good approximation of what you should be paying. If the price is significantly different, you need to look for what might cause this difference. If nothing stands out and the price is below expectation, it's a real buy. If the price varies on the upside, you may want to wait for a price drop or, alternatively, put in a good-till-canceled order for the security at its estimated fair value.

One area where this fair valuation exercise is particularly valuable is when a company has a number of similar securities outstanding. Here you have an opportunity to exploit pricing differences caused in large part by temporary supply/demand imbalances. Table 1.4 shows an example of

Table 1.4
Ford Preferreds—Comparative Pricing 12/31/2006

Ticker	Coupon	Maturity	Actual Price	Fair Value Price	Variance	% Variance	Dividend Accrual	Last Ex-date	Current Yield
PJE	8.25	2031	19.94	19.86	0.08	0.42%	0.97	7/12/06	10.87%
DKL	8.125	2031	19.9	19.57	0.33	1.68%	0.97	7/10/06	10.73%
KVU	8	2031	19.59	19.25	0.34	1.71%	0.94	7/12/06	10.73%
XVF	8	2031	19.8	19.25	0.55	2.76%	0.94	7/12/06	10.61%
TZK	7.7	2097	17.17	17.90	–0.73	–4.28%	0.28	11/8/06	11.40%
XKN	7.55	2097	17.04	17.56	–0.52	–3.03%	0.27	11/8/06	11.26%
KSK*	7.4	2046	17	17.27	–0.27	–1.58%	0.33	10/27/06	11.10%
FpA	7.5	2043	18.05	17.38	0.67	3.69%	0.22	11/19/06	10.51%
PIJ*	7.4	2046	17	17.27	–0.27	–1.58%	0.33	10/27/06	11.10%
Average for the Above									**10.92%**

various Ford Motor Company preferred and trust preferred issues and how they were priced on December 31, 2006. Since Ford is in the rating agency doghouse, all of its preferreds are way below comparable fair valuations of other companies with similar ratings. The game, then, is among the Ford issues, which one is the cheapest of the lot on any given day. The variance on December 31, 2006, between the cheapest (TZK) at—4.28 percent and the dearest (FpA) at 3.69 percent is a price disparity of 7.97 percent (4.28 percent plus 3.69 percent). If you buy only 20 shares of TZK instead of FpA, you'd have saved the price of this book!

In this exercise, the 11.90 percent average current yield for all these securities is used as the substitute fair value benchmark. However, because of various market anomalies, the current yields vary from 11.09 percent to 12.39 percent. Why is this? You will note that most of these preferreds are third-party trust preferreds sold under such names as Preferred Plus Trust FMX-1 (ticker PJE), Saturns—F 2003–5 (ticker DKL), Corts Trust for Ford Motor (ticker KVU), and Trust CERTS 02–1 (ticker TZK). An investor has quite a challenge even knowing that all these varieties exist and then understanding from these descriptions that this is a Ford bond repackaged as a $25 preferred. Also, the KSK and PIJ preferreds are a repackaging of the same Ford bond, but they will fluctuate as much as 25 cents from one another. That's a 1.5 percent price difference, not a

lot—but trade 500 shares once a month and at the end of the year you may make enough for the down payment on a new Ford car. Even the one issue actually put out by Ford (FA) has a variety of ticker symbols, depending on the designator used by the brokerage firm (FpA, F_A, FprA, F+A, F/A, to name them all). Given these identity obstacles, you can assume that few buyers have a handy chart in front of them to tell them which is the bargain of the day. Hence, the FpA issue, because it's the easiest to identify, is frequently the most overpriced. The other issues fluctuate in value from day to day, so investors should trade them based on dividend payment dates and price fluctuations by using good-till-canceled buy and sell orders.

When to Sell

Much has been written about, how, when, and at what price to buy stocks. Less frequently addressed is when to sell a stock; and never addressed is when you should sell an income security. Hence, what you read next is in itself worth the price of the book.

Most advice on selling focuses on the investor's tax situation and need for cash income. Rarely do we see articles that give the investors credit for being able to anticipate a declining situation on their own and choosing to get out before the roof falls in. Certainly, we know from the dearth of written sell recommendations by Wall Street analysts that such recommendations are generally slow in coming. Frequently, this is because the brokerage houses are more concerned with their relationships with the companies involved than with their relationship with client investors, or at least small investors.

Here are five reasons to change a fixed-income security position:

1. *Potential declines in the ratings of a company.* Such ratings are often based on a deteriorating balance sheet, cash flow, return on capital, price earnings ratios, or operating results. You may not want to wait until the big three rating agencies get up to speed. Look for early alerts from agencies such as Rapid Ratings International, Inc., to provide an early alert.
2. *Radical changes in management or a company's business.* Nothing

changes the fortunes of a company faster than good or bad management. Witness the stock run-ups when a prominent business executive accepts a leadership position with a new company. Witness also the decline in value when he or she leaves a company.

3. *Changes in the prospects that a security will be called.* As one approaches the call date for a security, review the coupon or dividend rate to determine whether it is above current market rates. If so, chances are the security will be called. If the yield to call is substantially below the current yield, it may be time to sell.
4. *Frequent trading of preferreds or bonds to take advantage of price fluctuations.* This tactic generally enriches only the broker. However, you should be open to replacement of an issue that will better serve the objectives of a portfolio. Some examples are comparable issues offering better income or extended call protection, issues with better growth potential (especially true with capped adjustable-rate securities that are trading near their maximum interest rate), and growth and income issues with better ratings but equal returns. Any given holding can become temporarily overpriced, especially with convertible securities, relative to other issues of comparable or better quality. Trading up in such a circumstance is advisable. Use the fair value approach detailed in the previous section to determine when a security may be overpriced. Since price spikes are fleeting, you may place good-till-canceled sell orders at your desired price and catch any opportunities.
5. *A corporate event that has an effect on a company's stock and is of concern to the company's fixed-income investors as well.* Monitor media reports about corporate events. Frequently, an event that is a negative for shareholders can be a real positive for bondholders. For example, a new stock offering or share dilution may cause the stock price to decline, but this is a positive for bondholders since it puts more collateral behind their claim.

On the one hand, a corporate takeover announcement can cause either an increase or decline in the value of a company's fixed-income obligations. The key to the direction of the change is whether the

acquiring party is more highly rated and the degree to which it intends to pay for the acquisition with new debt rather than stock and cash. There is often an immediate price reaction when such takeovers are announced. If the reaction is positive, consider selling into euphoria. Many such deals fall apart or deteriorate, from the creditors' perspective, as the bidding goes up. On the other hand, if the immediate reaction is a strong negative, it is already too late to avoid loss. Generally you should hold on to see whether the pressure from large creditors could improve or kill the proposed acquisition.

Don't be lulled into thinking that, as an income investor, you will not be affected by a corporate takeover or merger just because the price of your security does not immediately react. This may be due to a lack of initial disclosure details or the fact that there are no large institutional holders of the debt issue. Mergers don't happen unless someone sees a profit in the combination. The announcements of such mergers will carry the usual mantra of creating value through synergism and economies to be achieved. However, more often than not, they also are founded on the principal of making a profit at the expense of someone else. That someone else is often the bondholder or preferred stockholder. Hence, be skeptical about the announced reasoning behind corporate takeovers. When evaluating a corporate event and its consequences to you, keep in mind the order of priority for a typical business enterprise. That order is, first, the interest of management, next the interest of shareholders, then the interest of bank creditors, and last of all the bondholders and other creditors. Company employees also fit in there somewhere, but their positioning varies.

There are, of course, an array of personal reasons why an investor may decide it is time to sell. These tend to be the focus of most articles on this subject. Our discussion here on some of the investment-related reasons to sell is intended mainly to make you realize you must be alert for such events if you intend to be successful in managing your own account. A company announcement of plans to open a huge number of new stores next year may be designed to give the common stock a lift, but it means more debt and more risk for debt holders. When such changes are announced, it is generally time to look for the door.

Using Leverage and Margin

Investing using margin borrowing, like short selling, carries a negative connotation for most income investors. Margin is the amount a brokerage firm will lend you against your investments in order to invest even more. This use of borrowings against your investments is also referred to as *using leverage*. Typically, a brokerage firm will allow you to buy $2 worth of securities for every $1 of capital in the account. Against holdings of bonds and Treasuries, you can borrow even more. The interest rate the broker will charge you for this borrowing is negotiable and goes down as the amount increases. Use of leverage by fixed-income investors is a common strategy and has been broadly categorized as the *carry trade*. This is when investors borrow at generally lower short-term rates in order to reinvest at generally higher long-term rates. Hedge funds carry this to an extreme by borrowing 10 to 30 times their capital and may even borrow in a different currency than they invest in. Borrowing yen and investing in junk bonds are an example of the extremes here.

By definition, using leverage is high-risk investing. When the yield curve is flat, as it is at the time of this writing, it is also only marginally profitable. Leverage is useful, however, to exploit short-term opportunities and for year-end tax strategies. As you become more comfortable in your investment strategies, occasional use of leverage, such as to take advantage of year-end opportunities created by tax-loss selling by others can be an effective way to boost your total return. A word of caution here: Using leverage can be addictive, especially if you have success the first few times out, so be careful.

Credit Ratings

One of the marvels of fixed-income investing is credit ratings. They have traditionally been the single most important tool that investors have for defining their risk tolerance, making individual selections that fit that tolerance, and monitoring their portfolios for sell candidates due to changes in risk. Credit ratings are made by independent agencies that are recognized for that purpose by the SEC. They specialize in analyzing and

comparing the financial data of companies and rendering their objective opinions. The most prominent of these agencies are Moody's, Standard & Poor's, and Fitch. The ratings are standardized with letters that denote increasing levels of risk. The categories run from Aaa (Moody's)/AAA (S&P or Fitch) to C/CCC. Also, plus (+) and minus (–) symbols are used to further refine the ratings and, more important, to allow for more frequent rating changes, changes that signal the direction in which the credit standing of a company is moving. Note that credit ratings are of limited value in predicting the future prospects of a company. They are assigned today to debt issues that may be outstanding for 30 years or more, a time period during which most corporations will suffer a trauma or two. Also, the ratings are based on the numbers supplied to the agencies by the companies themselves. The agencies do not audit or verify such numbers, although they may employ skepticism derived from experience in valuing any unaudited reports they receive.

To put these ratings into perspective, Ratings of Aaa/AAA to Baa/BBB are called investment-grade ratings. Ratings of Ba/BB to C/CCC are considered below-investment-grade ratings, or, in the vernacular of the popular media, "junk." As I stated earlier, this misleading pejorative can be the source of significant profit to savvy investors. See Table 1.5.

The reason I describe ratings as a marvel in my opening comments is

Table 1.5
Credit Ratings and What They Mean

Agency/ Risk	*Standard Moodys*	*Rapid & Poor's*	*Fitch*	*Ratings*
Investment Grade				
Highest quality	Aaa	AAA	AAA	A1
High quality	Aa	AA	AA	A2
Upper medium grade	A	A	A	A4
Medium grade	Baa	BBB	BBB	B2
Below Investment Grade				
Lower medium grade	Ba	BB	BB	C1
Low grade	B	B	B	C4
Poor quality	Caa	CCC	CCC	D3
Most speculative	Ca	CC	CC	E1
In default	C	D	D	

that they are a remarkably accurate indicator of default risk. Historic studies of default rates for the past 20 years show that securities rated investment grade have a default rate of less than 1 percent. And when such securities do default, the average eventual recovery of principal is 50 percent or more. *One shortcoming of ratings is that it is hard for a one-dimensional rating to predict a two-dimensional risk.* By this I mean that the risk of default is one concern, and the other is the likely level of recovery in a bankruptcy. Clearly, these differ when one company has a ton of goodwill on its books and another has mostly hard assets. A second element to this problem is that a company may have different levels of seniority of debt. In a bankruptcy, that seniority determines who gets paid first. Rating agencies try to address this problem by rating the junior debt lower than the more senior. But this can be misleading because, if there are not enough assets to settle all debt claims (never mind shareholders), junior debt holders can often end up getting nothing, while those more senior make almost a full recovery. There is no clear answer for this problem, so when trouble begins to appear, a closer examination of the company balance sheet is in order.

When comparing the higher yield of corporate securities to U.S. Treasuries, yes, Treasuries have zero default or call risk, and therefore inflationary considerations are the principal cause of price movements. However, is this worth giving up 100 to 200 basis points of additional yield? Clearly, on this merit alone, the answer is no. The additional yield is justified mainly by the fact that corporate securities can suffer price declines due to rating changes that fall short of an actual default. In this respect, ratings can be a curse in that changes in the rating become an additional factor influencing the price of a security.

Ratings are essential for large institutional investors mainly to help determine the price to pay for a given security. *Individual investors have a much simpler concern when it comes to ratings: Their major concern is whether they can be confident of getting their principal back at maturity.* If the answer is yes, all the periodic ratings adjustments are just so much noise. It is, however, noise that has consequences on the price movement of the security. But such price movements, if properly interpreted as just noise, can represent buying opportunities for capital gain and additional income.

Note that while a company's debt may be rated, say A3/A–, it is the practice of rating agencies to rate the preferred stock of the same company one notch lower, or Baa1/BBB+ in this example. This practice has created a special opportunity for investors, since the yield difference between the preferreds and the bonds of an investment-grade issuer can be 100 basis points or more. The reason for this rating disparity and yield difference is that, should a company default or go into bankruptcy, the recovery a preferred stockholder can expect may be significantly lower, although more than that of common shareholders.

Below-Investment-Grade Ratings

Below-investment-grade, or "junk," ratings denote securities with a significantly higher risk of default, in addition to other risks. To compensate investors for this added risk, the yield on these securities is from 100 to 800 basis points (1 to 8 percent) higher than for U.S. Treasuries. Such a huge yield difference is clearly worthy of a second look. But just how much more risky are these securities?

One of the activities I have been involved in since the early 1980s has been tracking and reporting on bond defaults. Over the years we have accumulated a mass of statistical data on corporate defaults. This data indicates that default rates over the life of Ba/BB-, B/B-, and C/CCC-rated issues run about 1.5 percent, 4.5 percent, and 12 percent, respectively. Since I previously indicated that the yields on these securities are from 100 to 800 basis points higher, there must be other factors to account for these relatively higher yields.

Second to default risk is the marketability risk of high-yield bonds. This is the risk that, when you want to sell them, there would be no takers to buy them, except at drastically reduced prices. This happens because the high-yield bond market is almost wholly an institutional investor market. By this I mean that the bonds are mainly bought by a few thousand mutual or pension funds that buy in million-dollar-plus lots. When a piece of bad news comes out about an issuer, thanks to our modern information technologies, all these institutional holders see it at about the same time, and the reaction is pretty much uniform: They all want to sell. Would-be buyers, who also see the news, will offer prices

below comparably rated securities because they know there are many more sellers than buyers. Clearly, the risk of such an eventuality demands a yield premium by the original buyers.

Another cause of illiquidity in this market is a phenomenon called *flight to quality*, which occurs when uncertainty causes an across-the-board exodus from junk securities. For example, both of the Persian Gulf wars triggered such a flight. The flight-to-quality characterization is used because these investors tend to move into investment-grade bonds rather than out of bonds altogether.

As with investment-grade securities, junk-rated preferred stocks are rated one notch below the bond issues of the company. (Note also, when a company has senior and junior or convertible bond debt, the company will sport three rating grades to reflect the relative rank of these three types of securities.) It is in applying this across-the-board approach to ratings by the agencies that an opportunity opens up for investors.

I should point out that the yield difference between the lowest category of investment-grade bonds (Baa3/BBB–) and the highest-rated category of so-called junk bonds (Ba1/BB+) is generally 150 or more basis points. This jump in yield is more a reflection of the higher demand for investment-grade securities than it is a higher tendency to default. It also reflects the fact that many pension and mutual funds are not allowed to hold below-investment-grade securities, so the number of buyers shrinks and sellers increases when this relatively meaningless threshold is crossed. My bond default research indicates that the default rate difference between BBB and BB ratings would justify a difference of only about a 50 basis points, so investors interested in BBB-rated issues can buy BB- and BB-plus-rated issues and view the other 100-plus basis points as found money.

An additional lesson that can be drawn from how ratings are derived is the fact that when a preferred is rated Ba/BB, it means that the issuer is rated investment grade. Few issuers default only on their preferreds and not (eventually) on their bonds as well. Since the yield difference between a Baa/BBB bond and a Ba/BB preferred is 150 or more basis points, an investor who is comfortable with BBB bonds should be downright ecstatic with the comparable risk and higher yield for BB preferreds.

A few brief comments about rating changes. As I noted at the start, ratings often carry a plus (+) or a minus (–) (S&P) or a 1, 2, or 3 (Moody's) suffix to denote small variances. More important, their existence allows the rating agencies to make smaller changes to signal to investors which direction a company's fortunes are headed. Most rating changes in securities rated A—or higher are of small concern. To further alert investors to credit changes are the issuance of *credit outlooks* (negative or positive) and *credit watch* alerts (meaning a review is under way with positive or negative implications). Much of this has little market effect, but things do start to heat up when ratings go from A– to BBB+ or lower. The most jolting rating change is to Baa3/BBB—from any previous higher rating. This is the lowest investment-grade rating and often means that a downgrade to junk status is imminent. In fact, *I would argue that Baa3/BBB—is often a proxy for junk* to those in the know. It's a delay by rating agencies who want to postpone the blowback they get from the issuer when they finally drop the junk rating hammer. A downgrade to BB+, or junk, generally means a substantial price drop in both stock and debt prices and may be cause for the investor to reevaluate his or her holding. The market is aware that, at least in the recent past, rating agencies took pains not to downgrade an issuer to below investment grade until such a designation was long overdue, because issuers tend to become quite offended when this happens. After all, it is the issuers who pay the agencies to rate them, and shopping around for agencies is not unheard of. Since the Enron debacle, agency attitudes have changed, but the consequences are still playing out. See "Credit Ratings Drift: An Ongoing Problem" later in this chapter.

Since the yield difference between investment grade and below investment grade is 150 to 300 basis points, it is important to avoid securities that are making this rating transition downward (called *fallen angels* in Wall Street jargon). More to the point, however, it is a windfall to hold a security that makes the transition upward (called a *rising star*). Such upward transitions are only about half as frequent as the downward ones, but they do happen. Most come about due to an acquisition of another company by the issuer or a similar fortuitous event. Once in a while, they even result from hard work. In any case, securities of companies that are showing a series of rating improvements carry a premium for potential

future price increases. In the below-investment-grade category, that bonus can be sizable, since the chances of an issuer on the upswing in ratings going bust are significantly lower than its peers.

Investment Strategies

How to Read the Ratings

The huge default rates for corporate debt from 2000 to 2002 seem to have accelerated the credit downgrading process by the three major credit rating agencies (Moodys, S&P, and Fitch). This is particularly true for downgrades from investment grade to below investment grade. Published statistics indicate that once downgraded to below investment grade, most such fallen angel issuers never recover their investment-grade status. A recent study by Standard & Poor's, titled "Rating Performance 2002," gave the data needed to construct Table 1.6, which shows the percentage of all debt issuers upgraded or downgraded in three-year periods for 1981–1983, 1990–1992, and 2000–2002. It demonstrates that such downgrades have had a cumulative erosional effect on debt quality and thereby have increased the cost of debt refinancing for corporate America as a whole. And that effect is accelerating.

Adding to the problem is that credit agency reports and rating actions are sounding more and more like brokerage house analysts focusing on the prospects for a company's equity rather than on its ability to service its debt. Witness a recent credit agency's wholesale downgrading of utilities and its announced threat to do likewise to 14 aerospace companies. Such actions have the distorting effect of raising the borrowing cost for a company because its prospects have dimmed rather than because its financial condition has deteriorated. In a number of cases, the downgrading greases the skids for the very problems that has been projected.

Table 1.7 was constructed from the same previously cited S&P study and reflects the total market percentages of debt by the issuers' rating for the same three time periods.

Table 1.6
Rating Changes for Corporate America Over Time

% of Issuers	*1981–1983*	*1990–1992*	*2000–2002*
Upgraded	7.6 percent	7.0 percent	5.4 percent
Downgraded	12.2 percent	13.7 percent	13.6 percent
Net erosion	–6.4 percent	–5.6 percent	–8.2 percent

Table 1.7
Ratings of Corporate America Over Time

% of Issuers	*1981–1983*	*1990–1992*	*2000–2002*
Rated			
AAA	19.4 percent	10.2 percent	1.5 percent
AA	15.6 percent	25.2 percent	5.8 percent
A	19.9 percent	24.9 percent	15.7 percent
BBB	13.3 percent	14.2 percent	25.4 percent
Total inv. grade issues	68.2 percent	74.5 percent	48.4 percent
BB	13.4 percent	12.2 percent	25.5 percent
B	16.4 percent	10.5 percent	23.3 percent
CCC	2.0 percent	2.8 percent	2.8 percent
Total non inv.-grade issues	31.8 percent	25.5 percent	51.6 percent

It demonstrates that the percentage of U.S. industry rated as investment grade has slipped from 68.2 percent to 48.4 percent over 20 years. Corporate debt is essential to fuel America's growth, since corporations use it to leverage the earnings of shareholders. The value companies can create for shareholders by borrowing will be substantially less, assuming it does not become an outright negative. This is killing equity prices of mature companies, which find more and more of their earnings are needed just to maintain the current level of debt. It also encourages growth through acquisitions rather than internal expansion, activities that don't help to grow our economy. Put another way, more companies are finding they cannot justify the capital expenditures that fuel economic growth. A side effect of this diminishing universe of investment-grade issuers is that there is, today, a shortage of such debt resulting in low yields. On the other hand, the downgrading to below investment grade creates a supply of junk bonds that crowds out new issues meant to finance new endeavors. Some will argue that the companies themselves are to blame for this credit deterioration. While there is truth to this, I believe the credit agencies role needs to be reevaluated.

The lessons for investors in all this are several. First, investment-grade bonds face far more price risk from rating cuts by trigger-happy rating agencies than from default. Second, don't let the term *junk bonds* frighten you. Most of corporate America today is junk if you believe this warped description. Finally, after three years of watching most of the stock market suffer massive value meltdowns, bond default loss and risk pales by comparison. As I've said here before, the biggest investment risk today, which credit rating can't reflect, is uncertainty. So increase your so-called risk and consider buying securities rated Ba/BB or those one or two notches below investment grade. The higher return that comes with them will provide a cushion against that uncertainty. See Table 1.6.

Investment Strategies

Credit Ratings Drift: An Ongoing Problem

On March 13, 2006, Fitch Ratings cut the credit rating of Ford Motor Company further, from BB+ to BB, based on recent parts suppliers' bankruptcies. It cited rationale such as, "The potential for labor actions, potential financial support, and costs related to re-sourcing and double-sourcing all point toward potentially higher direct costs from Ford's supplier base," and "Clearly the deep stresses [among auto-parts suppliers] will make the cost cutting more difficult." The luminary at Fitch responsible for these nuggets of wisdom goes on to opine that Ford's cash reserves would be depleted quickly should suppliers begin requiring Ford to pay cash for parts and services, because suppliers could soon grow wary about Ford's ability to stay current on payments. And, not to leave anyone out, GM was thrown into the mix for having the same problems.

What is wrong with this picture? Why does my 23 years of tracking and reporting on corporate bankruptcies make me skeptical of these broad indictments by a credit rating agency, an organization that is supposed to give objective opinions based on known, or at least knowable, facts? Some of those knowable facts are these: Ford has $25 billion dollars of cash in the bank versus debts of only $18 billion; it earned $2 billion worldwide last year despite huge losses in the U.S. market; its balance sheet still sports $13.9 billion of shareholder equity; and it owns one of the largest, most profitable finance companies in the world. At this rate, Ford could continue losing money for a decade and survive. Although long before then, the credit rating agencies will have run out of rating letters and symbols.

Its not as though Ford and GM aren't aware of their problems and aren't busy trying to fix them. It's just that what the companies are doing doesn't seem to matter to the credit police. Ever since the Enron debacle, credit agencies have been on a campaign to restore their credibility. They have an agenda of their own, and it's all about ratings' competition. They are now in a race to outshine their competitors, even though there are only three players in this race.

A closer reading of the aforementioned statements by Fitch allows for some entirely different interpretations. Fitch is saying that because of its perceptions of Ford's outlook, parts suppliers will be more demanding on the company, thereby weakening Ford's financial position. Hence, Fitch feels it needs to anticipate the fallout from its dismal forecast by downgrading the company now and projecting more bad news for the future. This is the classic example of a self-fulfilling prophecy. Fitch executives might as well say, "We are cutting Ford's ratings because of possible future rating declines." Similar rating actions such as these lead to weaker players, such as Calpine and Mirant, having their credit cut off, precipitating eventual bankruptcy.

What is missing from the Fitch interpretation of events is recognition of business realities. A parts supplier to Ford or GM is a weak-to-strong relationship that does not change just because the weak member goes into bankruptcy. The strong member still determine how much it will buy only—now that the weaker is in bankruptcy and in a position to dramatically lower its costs, the strong partner will be looking to share those cost savings through lower component costs in the future. Yes, the weak partner can terminate the supply contracts and ask for higher prices, but the strong one can feel free to multisource in the future and use supplier competition to its advantage. Airline bankruptcies drove fares *down*, they didn't increase them. As for that nugget about how suppliers are going to demand cash payments and stricter terms in the future, this is sheer nonsense. It's a well-known truism that he who has the gold make the rules.

If credit agencies were of a mind to fairly weigh all the factors currently in play in the auto industry, the bankruptcy of the suppliers could just as easily be interpreted as a fortuitous event. In effect, the quote from Fitch could read, "Bankruptcy of parts suppliers will speed up Ford's plans to downsize and reduce component costs and will serve as the model for concessions in its own labor negotiations. Once the UAW sees how painful contract concessions in bankruptcy are, they will be reluctant to push GM or Ford into a similar negotiating position." In effect, the ratings outlook for Ford could just as easily have changed from negative to positive, and no rating change need have occurred. But then, such a scenario does not fit into the strategic plans of the credit agencies, in which Fitch is lagging Moody's and S&P in the derby to downgrade Ford and GM to the bottom.

The latest downgrade of Ford illustrates how credit rating agencies have drifted from their traditional function of evaluating a company's ability to survive to now evaluating a company's ability to prosper. The two things are very different, as long-term dogs Kodak and Xerox can attest. The shift has led to debt instruments acquiring stocklike volatility in their pricing. Investors who see and understand that this is what is happening can profit from the uncertainty.

The Federal Reserve Bank

The official role of the Federal Reserve Bank is to stimulate full employment and maintain price stability (i.e., dampen inflation). The principal tools it uses to achieve these goals is to manage short-term interest rates and the money supply. It manages short-term interest rates by setting the discount rate at which banks can borrow funds to meet their daily reserve requirements. It manages the money supply through buying and selling U.S. Treasuries. While this is a simplified explanation of what the Fed does, the consequences of its actions go well beyond its official

goals. Its policies and public statements influence Congress, the economy, and the securities markets. It has this influence not so much because of its regulatory tools, but more because society and the markets want Fed leadership as a beacon into the future. Industry decision makers hate making decisions in a vacuum, so being able to tie their decisions to a Fed statement or policy move provides cover from critics of that decision, thereby enhancing job security when they are wrong. However, Fed pronouncements are often opaque. They don't want to be definitive on matters outside their control. It's a game of the blind leading the dumb, but you didn't hear that from me.

Because of America's dominant role in world trade, the Fed is influential in maintaining worldwide confidence in the U.S. dollar and securities markets. It is the organization the world looks to when national and international financial crises arise. It's no wonder that the role of the Fed chairman, as chief spokesman for the organization, has been described as the second most powerful job in the world.

Why am I addressing this subject in a book on income investing? Because the Fed is an organization that must do some of the long-range thinking on economic matters in this country. Congresses and presidents come and go, and their policy and budget decisions, more often than not, are short-term political expedients and compromises. The United States, along with most of the rest of the industrialized world, faces a mounting problem of an aging population that will soon translate into a declining workforce and a booming retiree population. The funds to pay the cost of maintaining these retirees, Social Security and Medicare, don't exist. Sure, there are assets in the Social Security fund, but they're not assets like stocks in profit-making companies or bonds backed by company assets, they're U.S. Treasuries. Treasuries are a debt the government issues backed by the full faith and credit of the United States of America. In short, they're debt issued by the government to itself, so that the actual cash collected as Social Security taxes can be spent currently. Its repayment (i.e., turning it back into cash that can be used to pay retirees) is totally dependent on a stream of future taxes withheld from people still working and economic growth. Since the ratio of working people is declining relative to retirees, we will reach a point, some time around 2040, when the country will need to either cut

back on what are considered essentials (e.g., national defense) in order to pay for the retirees, or the politicians will alternatively take the easy way out and just print more money. While this is self-destructive, it is not uncommon in world history. It is how politicians renege on promises they have inherited from their predecessors and can't afford to keep. The only alternative to this bleak scenario is economic growth, which will fuel ever-greater tax revenues.

The Fed is aware of this demographic problem and the Social Security shortfall. More important, it has a role in making the problem less severe. Case in point, we all recall Chairman Alan Greenspan's comment in 1996 about the stock market showing "irrational exuberance." This expression of concern was not a protest against people getting rich playing the stock market. It was an expression of concern for the long-term effects of inflated stock prices. Those who lived through that era will recall the media infatuation with day traders and overnight millionaires. This was leading to a growing segment of the public thinking seriously about retiring at age 55.

The hard facts are that the Social Security and Medicare shortfalls are not going to be solved by Congress, by economic growth, or by any governmental agency—they are going to be solved by the public itself. The solution is both simple and elegant: *The baby boomer generation is going to reach minimum retirement age and continue to work. Why? Because they fear they don't have enough to last them for their remaining years. And for the most part they are right.* This may seem like a broken promise leading to a dismal future, but think again.

Through the advances of medicine and diet, we have an average life expectancy of over 80 years. In 1935 when Social Security was started, the average life expectancy for a male was 64, so targeting retirement at 65 was no gift. Today, you may have to be 67 to 70 before the same benefits are allowed, but that is still well before today's workers can be expected to die or lose their ability to function well. While Congress could push out the minimum retirement age even more, it doesn't have to. People will continue to work—and pay into Social Security while doing so—in order to save more in their private accounts. This is an elegant solution because it is a voluntary decision; it continues employment for the most experienced segment of our workforce; it continues

an inflow of money into Social Security from these workers; and it diminishes the unfunded burden Social Security has to bear, given that these people will collect from the system for fewer years. Even the Medicare system will benefit, assuming these people continue under their employee-sponsored health insurance plans. Aside from this, people who work have less time to talk themselves into ailments or visit doctors. By now you may wonder what all this has to do with the Federal Reserve Bank.

Well, the Fed can meet its official mandate while also taking certain subtle actions that can lead to major economic changes, including retirement plans. For example, the stock market collapse in 2000, while traumatic for millions of people, was an important event for the long-term health of the country. When a 55- or 62-year-old worker retires, the workforce loses an experienced, highly paid worker who was paying into Social Security, not drawing on it. The stock market collapse forced millions of workers to rethink their retirement plans. Bad for those workers, but good for the country.

While the Fed has not been directly accused of causing the 2000 stock market collapse, its policies certainly helped. Be sure that the Fed is no fan of early retirement, nor should it be. As a government organization concerned with the long-term health of the country, such a policy concern is correct. If you've done a good job planning your retirement and can retire early, God has blessed you. But if you are counting on catching the next stock market or housing boom to make it happen, don't look to the policymakers at the Fed for help. Low interest rates, moderate stock growth, and slower house price appreciation are important ways to avoid premature retirements. Expect the Fed to clamp down on any "irrational exuberance," be it in stocks or housing, and plan on getting rich slowly. And all this will be done in the name of stimulating personal savings, albeit such personal savings will come about mainly from boomers staying on the job a lot longer than they planned.

If the preceding analysis leaves you depressed, think about those poor Europeans. In their socialist systems of government, the public has come to depend on the state to provide for their welfare, come what may. Europeans have come to feel they are entitled to retire as soon as allowed (which is too soon for the same reasons as exist in the United

States), and they expect the state to somehow come up with the resources to support them. In short, they have no fear of running out of savings, because the state will provide. Well, the state will not be able to provide in those countries any more than Uncle Sam can provide here. Nor do any of the governments show the courage to push back the retirement age. In Europe, people will retire from their jobs too soon, leaving them with no fallback. Governments will not be able to provide the promised levels of pensions and support from their current revenue, so they will resort to the only alternative: they will print money. Yes, this will lead to rampant inflation and erosion of the euro currency, but by then it will be the only politically workable solution. It leaves pensioners with a declining real income level with no likelihood that payments will keep up with the cost of living. The investment lesson here for U.S. investors is, don't look to Europe or euro-denominated investments for long-term income opportunities. As for those European pensioners who rely so much on their governments, it's not too late to give God a second chance.

Security Dealers and Brokers

Smart income investing is all about getting a high cash return on your money while assuming the lowest possible level of risk. There is, however, a third element to this investment objective, and that is *fees*. Unless your idea of income investing is lending the money to a relative, you are going to have to pay some fees. Fees come in many names, shapes, and sizes, may be hidden or boldly advertised ($8.95 a trade), and can be paid up front, at the end of a transaction, or both, with monthly stops in between. Why do we put up with all these fees? Because we are scared of losing. Because we are constantly being told that the best never comes cheap. *We take comfort in paying the high fees because it allows us to believe we must be buying the best. If such were the case, the fees would be money well spent. Alas, there is little correlation between fee levels and performance levels.* In fact, those authors who enjoy playing on the fears of their readers would state here that often the relationship is inverted, but I would never do such a thing. Let's just say that income investors who don't closely monitor where and how much they are

paying in fees may well be earning less on their capital than the various people providing so-called help.

An investor should understand that brokers make their living from fees. In the old days this meant they were constantly offering you new opportunities to pay them fees. Today, with low commission rates, they look to making fees by selling you on the concept of a wrap account whereby, in return for a flat 1 or 1.5 percent, you can have their expert advice for free and pay no trading commissions (i.e., they're paid even if you do nothing all year!). The problem with wrap accounts is that the brokers want to wrap you in mutual funds from which they collect a fee as well. You are also a prime candidate for the new security underwritings the firm does. Actually, I should say all the new underwritings, not just the one or two hot ones each year, of which you might get 100 shares if you make enough noise. In fact, your allocation of a hot new issue is the true test of just how high you rate with these guys.

As a fixed-income investor, look for a discount broker and forget about all the supposed benefits of a wrap account. If you need advice on what to buy, then buy a newsletter like mine, which will cost you more than $8.95 but less than a wrap fee. Best of all, I'll even tell you when to sell. But enough self promotion—I just caution you that you will rarely find all your needs being met efficiently by using a full-service broker. Its very neat and comforting, but rarely is it cost effective. In fact, the big-name firms have a big name to protect so they put severe constraints on what their brokers are even allowed to talk about with you. This is because their number one concern is being sued for giving bad advice. Not that they lose very many cases, given the way the arbitration system for settling disputes works. Rather, they know investors will settle for mediocre returns as long as they don't have significant losses. Hence, you will rarely see them recommend a junk bond to you unless they need to unload it out of inventory. If you should insist on buying them, the order will be clearly marked "unsolicited," even when the broker brings it to your attention.

In deciding who to use as a broker, look at what you intend to do. If you plan to buy mostly mutual funds, go with someone like Fidelity and use it for brokerage services as well. If you intend to buy municipal bonds, use someone like Joe Brady at William Blair & Company. If you

like to buy and hold bonds, go to a strong bond house like Merrill Lynch or Bear Sterns. But, if you plan to actively manage your own account, go with a Charles Schwab, Scott Trade, or an E*Trade.

Finally, if you're in poor health and need someone you can rely on to look after your account for a spouse or children, look to retaining an investment advisor you can trust, or use a bank trust department or company such as Northern Trust. In this situation there is no low-cost solution, but, then, it's not a time you should be seeking one.