# PartII Finding an Investment Strategy That Lets You Sleep at Night 

The 5th Wave
By Rich Tennant


## In this part . . .

$T$he best exercise routine you've ever had probably worked because it was right for you - you enjoyed the exercises and were able to work them into your daily schedule. You may not have become Arnold Schwarzenegger or Suzanne Somers, but you kept fit. Meanwhile, your neighbor may have invested in fancy clothing, equipment, or a health club membership for exercises that he hated and quit after a month. Although he had the best intentions, he's now back at square one, while you're steadily achieving your goal of fitness.

Retirement planning is similar. If you take the time to develop a plan that suits you and your personality, you'll have the best chance of meeting your goals for retirement. The key is finding a happy medium between spending everything today and saving nothing for the future, and putting away so much for the future that you don't have fun today. This part aims to help you find this happy medium.

## Chapter 4

## Developing a Savings Plan

In This Chapter

$>$ Deciding when to retire

- Figuring out how much money you'll need and where it will come from
$>$ Calculating how much to save in order to reach retirement
pontaneity can be a lot of fun. But it's the last thing you want
when you're planning for retirement. Saving for retirement involves delayed gratification, planning, and discipline, but today's sound-bite society may find this news hard to swallow. Luckily, tools like a 401(k) can help make the process less painful, because a lot of the saving is automatic after you set up the plan.

If you're young, you may wonder whether it's too soon to plan for something that's 30 or 40 years away. The truth is that the earlier you start, the better, because your savings will have more time to build up through compounding (as the earnings on money in your account continue to earn even more money). Starting to save early will give you more freedom later to decide what you want to do.

On the other hand, if you're already in your 40s or older, you may wonder whether it's too late for you to plan. The bottom line is that it's never too late. But you may find that you need to scale back some of your goals or increase the amount you save each year. This chapter aims to help you set and meet retirement goals and develop a detailed plan for achieving them. It walks you through the steps of deciding on a target date to retire, calculating how much income you'll need in retirement, developing a savings plan to achieve that amount of income, and tracking your progress as you save over the years.

## Setting a Target Date for Retirement

The first step in planning for retirement is deciding when you want to retire. This can be trickier than it sounds. Attitudes about what retirement means and when it should happen have been changing over the last decade or two.

It used to be clear-cut - you worked until you were 65 (or maybe 62 ), and then you were forced to retire with a gold watch and a pension. Social Security checks started arriving in the mail soon after your 65th birthday. Nowadays, things are different. There's no standard retirement age that applies to everyone and every type of account. Consider the following:
$\checkmark$ If you were born in 1960 or later, you'll only be able to take full Social Security benefits when you turn 67 , rather than when you turn the traditional age of 65 .
$\checkmark$ You're allowed to withdraw money from your 401(k) without penalty at age $591 / 2$ (or age 55 if you leave your employer).
$\checkmark$ You're required to start withdrawing money from your 401(k) when you're $701 / 2$ - unless, that is, you're still working for the company sponsoring the $401(\mathrm{k})$. Then you can wait until you retire to take out your money, unless you own more than 5 percent of the business.

Whew! With all those different ages, how can you know when to retire?

For the purposes of planning, you need to estimate when you'll have to start withdrawing the money in your retirement accounts, and whether that money will be supporting you entirely, or whether you'll have other sources of income.

Choosing an age now can help you plan how much you need to save and how much time you have in which to save it (your time horizon, in financial planning lingo). The advantage of estimating a retirement age now is that you can see whether that goal is reasonable. If it's not, you may have to rethink it. The key is to remain flexible.

In choosing a target date for retirement, you need to consider several factors, including
$\checkmark$ When you can access your various sources of retirement income
$\checkmark$ What you'll do when you retire
Whether living to the age of 100 runs in your family

## Determining when you can access retirement income

When you retire and no longer earn a paycheck, you'll need to get income from somewhere. If you plan well, that income should be available from several sources.

## Social Security

The first source of income that you'll have during retirement is Social Security, the federal government's social insurance program that includes monthly benefit payments to retirees. Every worker who earns enough credits (by working) will be eligible for Social Security benefits in retirement.

Many people mistakenly think that they'll start receiving Social Security checks when they turn 65. In fact, for anyone born after 1938, the age to receive full Social Security benefits (called the normal retirement age) will be at least a couple of months past their 65th birthday. If you were born in 1960 or later, you won't be eligible for full Social Security benefits until your 67th birthday.

You can choose to receive reduced benefits at age 62 (even if you were born in 1960 or later). If you retire at age 62 , your benefits will be reduced to 80 percent of the full benefit if 65 is your normal retirement age, and 70 percent of the full benefit if 67 is your normal retirement age. Keep in mind that you'll always receive the reduced benefits if you retire at age 62; they won't increase when you reach your normal retirement age.

Table 4-1 shows the full retirement age for different birth years after 1937.

| Table 4-1 | Social Security Full Retirement Age and <br> Reduction in Benefits for Early Retirement |  |
| :--- | :--- | :--- |
| Year of Birth <br> (If you were born <br> on Jan. 1, refer to <br> the previous year) | Full Retirement Age | Total Reduction <br> in Benefits if You <br> Retire at 62 (in \%) |
| 1937 or earlier | 65 | 20.00 |
| 1938 | 65 and 2 months | 20.83 |
| 1939 | 65 and 4 months | 21.67 |
| 1940 | 65 and 6 months | 22.50 |
| 1941 | 65 and 8 months | 23.33 |
| 1942 | 65 and 10 months | 24.17 |
| $1943-1954$ | 66 | 25.00 |
| 1955 | 66 and 2 months | 25.84 |
| 1956 | 66 and 4 months | 26.66 |
| 1957 | 66 and 6 months | 27.50 |
| 1958 | 66 and 8 months | 28.33 |
| 1959 | 66 and 10 months | 29.17 |
| 1960 and later | 67 | 30.00 |

Source: Social Security Administration Web site (WWW. s sa. g ov).

In sum, you can't expect to receive any retirement benefits from Social Security before age 62 , and you can increase the amount you receive if you wait until 65, 66, or 67 (whatever your "normal retirement age"), or even 70.


A few years ago, the Social Security Administration (SSA) began mailing annual statements to workers who are over 25 years old. These statements estimate how much money they'd receive monthly at age 62, at full retirement age, and at age 70, based on their income to date. If you threw yours away or can't find it, you can contact the SSA for a new one at www. ssa.gov/mystatement/. Or if you prefer not to send personal information over the Internet, you can download a form that you mail in to request the statement. You can also request the form by telephone, at 1-800-772-1213, or by appearing in person at your local Social Security office. The mailing address is on the form.

## Social insecurity?

Social Security is what's known as a "pay-as-you-go" system. When you pay Social Security taxes out of your paycheck, the taxes don't go into an "account" in your name. The taxes go to pay the benefits of today's retired folks. In the same way, today's toddlers and teenagers will be supporting you one day - hopefully. But as the 76-million-strong Baby Boom generation starts turning 65 in 2011 (and doesn't stop until 2029), a tremendous strain will be placed on the system. In 1945 there were an estimated 41.9 workers for every retiree. By 1999, the ratio dropped to an estimated 3.4 workers for every retiree. By about 2030, the ratio is expected to drop to two workers for every retiree. Clearly, something will have to give.

The Social Security program is projected to begin running a deficit around 2017. In 2002, the U.S. government estimated that the trust fund would run out of money completely in 2041 if nothing were done to shore it up.

You can factor the estimated benefit amount into your planned retirement income, but remember that Social Security was never meant to be your only source of retirement income. What's more, the future of Social Security is somewhat uncertain. Although Social Security benefits may not disappear completely during the next 20 to 30 years, they may be reduced.

## Other sources

Now, what about your other sources of income during retirement? The following list highlights possible retirement resources above and beyond Social Security:

401(k): As long as you're working for the employer that sponsors the plan, you generally can't take money out before you're $591 / 2$. If your plan does permit you to withdraw money, you'll have to pay taxes and an extra early withdrawal penalty on the money you take out. If you leave your job at age 55 or older, you can withdraw the money without any penalty tax, but you still have to pay income tax. You can also roll it over into an IRA, as we explain in Chapter 8.
$\checkmark$ Other tax-favored retirement accounts: Accounts similar to a 401(k), such as a 403(b) or IRA, have rules similar to those of 401(k)s. Generally, you shouldn't count on having easy access to your money before age $591 / 2$, or possibly age 55 . The rules are different for 457 "deferred-comp" plans. (We explain 403(b) plans in Chapter 10, and 457 plans in Chapter 11.)
In some circumstances, you may be able to get at your retirement account money before age 55 without paying an early withdrawal penalty. (We cover this in Chapter 8.)

## 72 Part II: Finding an Investment Strategy That Lets You Sleep

$\checkmark$ Traditional defined-benefit pension plan: If your employer offers one of these plans (see Chapter 2 for specifics), your human resources or benefits representative should be able to tell you what your expected payment will be if you qualify to receive benefits.
$\checkmark$ Life insurance: Some people buy a type of life insurance policy that allows them to build up a cash account (a cash value policy) rather than buy term life insurance, which is worth nothing after you stop making payments. If you have a cash value policy (such as whole life or variable life), it should have a cash account that you can tap at retirement.
$\checkmark$ Regular taxable savings: A taxable account is any kind of account (such as a bank account, mutual fund account, or stock brokerage account) that doesn't have special tax advantages.
$\checkmark$ Part-time work: No matter when you retire, you may want to take a part-time job that will keep you active and give you extra income.
$\checkmark$ Inherited wealth: You shouldn't count on any inheritance until you actually receive it. But if you do inherit a substantial amount of money, integrate at least part of it into your overall financial plan to give yourself a higher retirement income.


If you plan to retire before age 65, don't forget to factor in the cost of medical insurance. The availability and cost of medical care is a major issue if you plan to retire before you and your spouse are eligible for Medicare, the government-sponsored medical program for those age 65 and older.


You can take the first step toward figuring out when it'll be feasible to retire by writing down on a piece of paper your sources of income and when you can access them.

## Figuring out what you'll do when you retire

Assume that your retirement begins tomorrow. What will your life be like? This is the necessary question that retirement calculators don't ask. Most importantly, what will you do six months after the novelty of retirement wears off, when you're tired of golfing, shopping, traveling, or just being a couch potato? Many people find it difficult to go straight from full-time work to full retirement - particularly when they haven't developed interests outside of work.

According to the Employee Benefit Research Institute’s 2002 Retirement Confidence Survey, 24 percent of retirees said that they had worked at least sporadically since retiring. Of those, more than half said that the reason they continued to work was that they enjoy working and want to stay involved. About 25 percent of them said that they worked to keep health insurance or other benefits, while 22 percent said that they wanted money to buy extras.

Having an idea of what you'll do in retirement is important so that you can avoid these common mistakes:
$\checkmark$ Retiring too early, realizing that your money isn't going to last, and being forced to go back to work. In the meantime, you've lost out on contributing more to your 401(k) - and possible employer contributions, as well.
$\checkmark$ Retiring, becoming totally bored within six months, and begging for your old job back.

## Keeping the family gene pool in mind

When you think about the age at which you want to retire and how long you'll need to finance your retirement, keep your genes in mind. If you have a history of longevity in your family, you should plan financially to live until 100. (If you're the cautious type, you may want to do this anyway, even if you don't think there's a chance you'll live that long.)

## Calculating How Big Your Nest Eqq Should Be

After you decide when to retire, your next step is to consider how you'll feel when you're retired and no longer have a paycheck. You'll probably need close to 100 percent of your income in the year before you retire in order to maintain your standard of living.

How much savings will it take to provide this level of income? The answer is "a lot."


Ted recommends trying to save 10 times the income that you expect to earn in the year before you retire. This formula is a good starting point if you plan to retire at your Social Security normal retirement age ( 65,66 , or 67 ). If you plan to retire earlier, you'll need to save more. If you have a company pension or other sources of income, or if you retire later, you may be able to get away with saving a bit less.

## What goes up - or inflationadjusted income

What is inflation-adjusted income? Inflation is the rate at which prices increase over time. When you plan for the future, you have to plan for prices to go up, otherwise your money will run out too soon. Inflation-adjusted income essentially refers to the purchasing power of your money - what your bucks can buy. It means that if over the next 25 years you want to be able to buy what will cost $\$ 30,000$ today, you'll need actual dollar amounts that are higher than $\$ 30,000$.

You can't know for sure what the inflation rate will be. You need to make an assumption. We use 3 percent, which is on the low side from a historical perspective but, we believe, realistic for long-range planning.

The following table shows how much income is needed to keep the buying power of $\$ 10,000$ over the years. (Using $\$ 10,000$ makes it easy to adjust to whatever income you think will be right for your situation.) For example, you can calculate that you'll need $\$ 60,984$ in the 25th year of your retirement to buy what $\$ 30,000$ will buy in the first year ( $\$ 20,328 \times 3$ ).

| Number of <br> years after <br> you retire | Annual income <br> needed | Number of <br> years after <br> you retire | Annual income <br> needed |
| :--- | :--- | :--- | :--- |
| 1 | $\$ 10,000$ | 14 | $\$ 14,685$ |
| 2 | $\$ 10,300$ | 15 | $\$ 15,126$ |
| 3 | $\$ 10,609$ | 16 | $\$ 15,580$ |
| 4 | $\$ 10,927$ | 17 | $\$ 16,047$ |
| 5 | $\$ 11,255$ | 18 | $\$ 16,528$ |
| 6 | $\$ 11,593$ | 19 | $\$ 17,024$ |
| 7 | $\$ 11,941$ | 20 | $\$ 17,535$ |
| 8 | $\$ 12,299$ | 21 | $\$ 18,061$ |
| 9 | $\$ 12,668$ | 22 | $\$ 18,603$ |
| 10 | $\$ 13,048$ | 23 | $\$ 19,161$ |
| 11 | $\$ 13,439$ | 24 | $\$ 19,736$ |
| 12 | $\$ 13,842$ | 25 | $\$ 20,328$ |
| 13 | $\$ 14,258$ |  |  |

## If you're retiring in the near future

Assume that you're retiring at the end of this year, and your salary for this year is $\$ 50,000$. According to Ted's benchmark, you should save $\$ 500,000$ to hit the " 10 -times" goal.

Sound like a lot of money? It is, but it would provide approximately $\$ 30,000$ a year of inflation-adjusted income (see the sidebar "What goes up - or inflation-adjusted income" in this chapter for more information) over 25 years, assuming
$\checkmark$ The rate of inflation is 3 percent.
$\checkmark$ Only a small cushion will remain at the end of 25 years.
$\checkmark$ You invest 50 percent of your nest egg in stocks and 50 percent in bonds during this period.

A yearly income of $\$ 30,000$ may not sound like much, but remember that your taxes will be lower when you retire, and you won't need to save income for retirement anymore. Your expenses will likely be less than when you were working. Your income should also be supplemented by your taxable savings and Social Security, as well as any of the other sources listed earlier in the chapter, giving you an adequate level of retirement income.

## If your retirement is farther off

We can hear you calling, "Hey, a little help over here. . . . I'm not retiring tomorrow, so how do I know how much I'll be earning the year before I retire?" Not to worry. Table 4-2, Ted's Inflation Adjustment Table, is here to help.

| Table 4-2 | Inflation Adjustment Table |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Number of Years | Assumed Annual Rate of Change |  |  |  |  |
|  | $\mathbf{3 \%}$ | $\mathbf{3 . 5 \%}$ | $\mathbf{4 \%}$ | $\mathbf{4 . 5 \%}$ | $\mathbf{5} \%$ |
| 1 | 1.03 | 1.035 | 1.04 | 1.045 | 1.05 |
| 2 | 1.06 | 1.07 | 1.08 | 1.09 | 1.10 |
| 3 | 1.09 | 1.11 | 1.12 | 1.14 | 1.16 |
| 4 | 1.12 | 1.15 | 1.17 | 1.19 | 1.22 |
| 5 | 1.16 | 1.19 | 1.22 | 1.25 | 1.28 |

Table 4-2 (continued)

| Number of Years | Assumed Annual Rate of Change |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | 1.19 | 1.23 | 1.27 | 1.30 | 1.34 |
| 7 | 1.23 | 1.27 | 1.32 | 1.36 | 1.41 |
| 8 | 1.27 | 1.32 | 1.37 | 1.42 | 1.48 |
| 9 | 1.31 | 1.36 | 1.42 | 1.49 | 1.55 |
| 10 | 1.34 | 1.41 | 1.48 | 1.55 | 1.63 |
| 11 | 1.38 | 1.46 | 1.54 | 1.62 | 1.71 |
| 12 | 1.42 | 1.51 | 1.60 | 1.70 | 1.80 |
| 13 | 1.46 | 1.56 | 1.67 | 1.77 | 1.89 |
| 14 | 1.51 | 1.62 | 1.73 | 1.85 | 1.98 |
| 15 | 1.56 | 1.68 | 1.80 | 1.93 | 2.08 |
| 16 | 1.60 | 1.74 | 1.87 | 2.02 | 2.18 |
| 17 | 1.65 | 1.80 | 1.95 | 2.11 | 2.29 |
| 18 | 1.70 | 1.86 | 2.02 | 2.21 | 2.41 |
| 19 | 1.75 | 1.93 | 2.10 | 2.31 | 2.53 |
| 20 | 1.80 | 1.99 | 2.19 | 2.41 | 2.65 |
| 21 | 1.86 | 2.06 | 2.28 | 2.52 | 2.79 |
| 22 | 1.91 | 2.13 | 2.37 | 2.63 | 2.93 |
| 23 | 1.97 | 2.21 | 2.46 | 2.75 | 3.08 |
| 24 | 2.03 | 2.29 | 2.56 | 2.87 | 3.23 |
| 25 | 2.09 | 2.37 | 2.66 | 3.00 | 3.39 |
| 26 | 2.15 | 2.45 | 2.77 | 3.14 | 3.56 |
| 27 | 2.22 | 2.53 | 2.88 | 3.28 | 3.74 |
| 28 | 2.28 | 2.62 | 3.00 | 3.43 | 3.92 |
| 29 | 2.35 | 2.72 | 3.12 | 3.58 | 4.12 |
| 30 | 2.42 | 2.81 | 3.24 | 3.74 | 4.33 |

Assume that you're 41, and you want to retire when you're 62. You need to project your current income to what you think you'll be earning 20 years from now (at age 61, the year before you retire).

Decide on an average rate that you expect your income to increase - say 3 percent. Go down the Number of Years column (refer to Table 4-2) to 20, and over to the $3 \%$ column, where you see the factor of 1.80 . Multiply your current income, say $\$ 50,000$, by 1.8 , and you'll see that your expected income at retirement is $\$ 90,000$. Using the 10 -times rule, your desired nest egg becomes $\$ 900,000(10 \times \$ 90,000)$. This is an easy way to get a rough idea of how big a retirement account to build - regardless of your current age or income.

## Using a retirement calculator

Another way to develop a workable retirement plan is by using one of the many retirement calculators and other tools available on the Internet or through the financial organization that handles your 401(k) money. Remember that each calculator uses different methods and assumptions, so different calculators can produce widely varying results. Check the assumptions each calculator uses to see if they make sense for your situation.

Here are some of the better general calculators we've seen:

```
~www.quicken.com/retirement/planner
~ http://cgi.money.cnn.com/tools/retirementplanner/
    retirementplanner.jsp
~www.asec.org/ballpark/index.htm
~www.smartmoney.com/retirement (use the various
    "Retirement Worksheets")
```



The major benefit of using a retirement calculator is that it gives you an investment reality check. Will the amount that you're saving and the investment mix enable you to accumulate what you need? A good retirement calculator will answer this question and also help you decide how to close any savings gaps. Generally, you can close a gap by increasing your contributions, adjusting your investments to achieve a higher long-term return, or a combination of the two.

Some independent companies like mPower, Financial Engines, and Morningstar are excellent sources of retirement planning information and calculations. They go farther than simple calculators and actually give you specific advice on how to invest money in your 401(k) plan and other retirement accounts. We discuss this type of assistance more in Chapter 6.

In the meantime, here's where you can find mPower, Financial Engines, and Morningstar on the Internet.
mPower: www.mpower.com
$\checkmark$ Financial Engines: www.financialengines.com
Morningstar: www.morningstar.com

## Developing Your Retirement Savings Plan

After you recover from the shock of how much you'll need in your retirement account, your first thought will probably be, "How on earth do I accumulate ten times my annual income - and then some - by the time I retire?"

The key is to start as early as you can, because the earlier you start saving, the longer your money has to benefit from compounding, even if you only start by putting away small amounts.

## Cutting down on your expenses

We realize that many workers barely earn enough to pay for basic necessities and can't eke out anything extra for a $401(\mathrm{k})$ plan contribution. But it's important to try. Or you may be in your 40s and want to save more to catch up, but you can't figure out where to find the money. You may be surprised at some of the places you can save money. Often, a few minor spending adjustments can free up money for savings.

Like most everything, it all boils down to making choices. Table 4-3 lists suggestions for cutting your spending. None of the expenses listed are necessities - and cutting out one or two, or reducing the cost of a few, can help begin your savings program.

| Table 4-3 | Ten Tips for Saving Money |
| :--- | :--- |
| Expense | How to Save |
| \$1 each day or week for a <br> lottery ticket | If you buy one ticket daily, cut back to one <br> a week. If you buy one a week, cut back to <br> one a month. |


| Expense | How to Save |
| :--- | :--- |
| \$25 a year for a subscription <br> to a magazine you never read | If you have three or four, you're <br> approaching \$100. Cancel them. |
| \$25 for a carton of cigarettes | Cut down the number you smoke, or better <br> yet, try to quit. Not only will you save <br> money on cigarettes but your life insurance <br> premiums should go down - not to <br> mention other health-related costs. |
| \$25 for a movie and popcorn <br> for two at a cinema. | Pay $\$ 3$ to rent a video, or better yet, <br> see what your local library offers for <br> free. Pop some popcorn yourself - <br> it'll probably taste better, anyway. |
| $\$ 5$ a day for an alcoholic | Instead of going out every night with your <br> friends, try to cut back to just weekends. |
| beverage | Drink what's provided at your office, <br> or buy in bulk and bring it to work. |
| $\$ 3$ a day for various other |  |
| beverages of choice |  |
| (bottled water, soda, |  |
| coffee, and so on) | Pack your own lunch a few times a week. |
| $\$ 5-\$ 10$ a day for lunch | Do you really need an SUV with leather <br> seats and GPS? |
| A \$500 monthly car payment |  |
| versus a \$350 payment | This depends on where you live. <br> In California, add $\$ 400,000$ to each price. |
| A \$250,000 home versus a |  |
| $\$ 150,000$ home | Visit attractions close to home to avoid <br> plane fares. Go to places that people <br> would go if they were visiting you. |
| $\$ \$ 500$ vacation versus a |  |
| $\$ 1,000$ vacation |  |

You're probably wondering whether all this nickel-and-diming is really worth it. We're not suggesting that you give up everything on the list - only that you look at what you spend to see if you can cut some costs without feeling too much pain. Giving up a few nonessential items today is far better than struggling without necessities during your retirement years.


Ted says he's never met a 401(k) participant who's claimed to have saved too much. He's never heard participants say that they wished they'd spent more money earlier. Instead, what many older participants tell him is that they wish they had started saving sooner.

This may be difficult to believe, but the important thing about money is not how much you earn. It's how you manage what you have.

Spenders will always spend what they have or more, regardless of how much they earn. A spender who gets a substantial increase in income will adjust his spending habits to the new level within a very short period of time.

If you have a tendency to spend, you should automatically take a portion of any pay increase and put it into a 401(k) or similar forced savings vehicle before you get used to having it in your hot little hands. Otherwise, you may never break your spending cycle.

## Considering sample plans

After you begin to save, you have to keep checking to make sure that you're on track. Certain benchmarks can generally help you gauge where you should be.

The following savings goals are designed for 25 -year-olds just starting their savings programs. If you're over age 25 , these benchmarks can still tell you if you're on target with your retirement planning. If you're significantly behind these benchmarks, you're certainly not alone.

Remember that these are ideals; they're not here to make anyone feel defeated. Instead, the intention is to motivate you to sit down and develop a workable plan for catching up. This may mean that you have to work longer than you'd like or substantially increase your savings rate. If you feel depressed looking at these, just be glad you're starting now. If you'd waited, imagine how much more catching up you would have to do!
$\checkmark$ Savings goal by age 35: One times your pre-retirement income. Your goal should be to accumulate the amount of your annual income by age 35 . Table $4-4$ shows what you need to do to accomplish this goal.

Table 4-4 How to Accumulate One Times Your Pre-Retirement Income by Age 35

| Age | Your Pay | Your <br> Contribution | Employer's <br> Contribution | Total Return | Year End <br> Value |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 25 | $\$ 25,000$ | $\$ 1,000$ | $\$ 500$ | $\$ 68$ | $\$ 1,568$ |
| 26 | $\$ 26,000$ | $\$ 1,300$ | $\$ 650$ | $\$ 229$ | $\$ 3,747$ |


| Age | Your Pay | Your <br> Contribution | Employer's <br> Contribution | Total Return | Year End <br> Value |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 27 | $\$ 27,040$ | $\$ 1,622$ | $\$ 811$ | $\$ 446$ | $\$ 6,626$ |
| 28 | $\$ 28,122$ | $\$ 1,687$ | $\$ 844$ | $\$ 710$ | $\$ 9,867$ |
| 29 | $\$ 29,246$ | $\$ 1,755$ | $\$ 878$ | $\$ 1,006$ | $\$ 13,506$ |
| 30 | $\$ 30,416$ | $\$ 1,825$ | $\$ 912$ | $\$ 1,339$ | $\$ 17,582$ |
| 31 | $\$ 31,633$ | $\$ 1,898$ | $\$ 949$ | $\$ 1,710$ | $\$ 22,139$ |
| 32 | $\$ 32,898$ | $\$ 1,974$ | $\$ 987$ | $\$ 2,126$ | $\$ 27,226$ |
| 33 | $\$ 34,214$ | $\$ 2,053$ | $\$ 1,026$ | $\$ 2,588$ | $\$ 32,893$ |
| 34 | $\$ 35,583$ | $\$ 2,135$ | $\$ 1,067$ | $\$ 3,104$ | $\$ 39,199$ |

The numbers in Table 4-4 are based on the following assumptions:

- Annual pay increases of 4 percent
- Employee contributions of 4 percent of pay the first year, 5 percent the second year, and 6 percent in subsequent years
- Employer matching contribution of $50 \llbracket$ on the dollar, limited to the first 6 percent of pay that the employee contributes
- An average investment return of 9 percent

The 50 percent employer matching contribution is a big help. You have to adjust your contributions if you're in a plan that has a lower employer contribution or none at all.

Savings goal by age 45: Three times your pre-retirement
income. Assume that in the next 10 years you increase your contribution rate to 10 percent. You continue to receive a 50 percent match (equivalent to a 3 percent of pay contribution from your employer), your annual pay continues to increase by 4 percent per year, and your investment return is 9 percent per year. Table $4-5$ shows the results.

| Table 4-5 | How to Accumulate Three Times Your <br> Pre-Retirement Income by Age 45 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Age | Your Pay | Your <br> Investment | Employer's <br> Contribution | Total Return | Year End <br> Value |
| 35 | $\$ 37,006$ | $\$ 3,700$ | $\$ 1,110$ | $\$ 3,744$ | $\$ 47,753$ |
| 36 | $\$ 38,487$ | $\$ 3,849$ | $\$ 1,154$ | $\$ 4,523$ | $\$ 57,279$ |
| 37 | $\$ 40,026$ | $\$ 4,003$ | $\$ 1,201$ | $\$ 5,389$ | $\$ 67,872$ |
| 38 | $\$ 41,627$ | $\$ 4,163$ | $\$ 1,249$ | $\$ 6,351$ | $\$ 79,635$ |
| 39 | $\$ 43,292$ | $\$ 4,329$ | $\$ 1,299$ | $\$ 7,420$ | $\$ 92,683$ |
| 40 | $\$ 45,024$ | $\$ 4,502$ | $\$ 1,350$ | $\$ 8,604$ | $\$ 107,139$ |
| 41 | $\$ 46,825$ | $\$ 4,683$ | $\$ 1,405$ | $\$ 9,917$ | $\$ 123,144$ |
| 42 | $\$ 48,698$ | $\$ 4,870$ | $\$ 1,461$ | $\$ 11,368$ | $\$ 140,843$ |
| 43 | $\$ 50,646$ | $\$ 5,065$ | $\$ 1,519$ | $\$ 12,973$ | $\$ 160,400$ |
| 44 | $\$ 52,672$ | $\$ 5,267$ | $\$ 1,580$ | $\$ 14,744$ | $\$ 181,991$ |

By age 45, you'd be ahead of schedule with an accumulation of more than 3.5 times your annual pay.

Savings goal by age 55: Seven times your pre-retirement income. Assume that everything stays the same for the next 10 years - except that you increase your contribution rate from 10 percent to 15 percent at age 50 , your annual salary increases by 4 percent per year, and your investment return continues at 9 percent until age 50 . The return then drops to 8 percent from age 50 to 55 , because you sell some of your more risky stock investments in favor of investments that provide a more stable, but lower, return. Table 4-6 shows the result.

## Table 4-6 How to Accumulate Seven Times Your Pre-Retirement Income by Age 55

| Age | Your Pay | Your <br> Investment | Employer's <br> Contribution | Total Return | Year End <br> Value |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 45 | $\$ 54,778$ | $\$ 5,478$ | $\$ 1,643$ | $\$ 16,699$ | $\$ 205,811$ |
| 46 | $\$ 56,970$ | $\$ 5,697$ | $\$ 1,709$ | $\$ 18,856$ | $\$ 232,073$ |
| 47 | $\$ 59,248$ | $\$ 5,925$ | $\$ 1,777$ | $\$ 21,233$ | $\$ 261,008$ |


| Age | Your Pay | Your <br> Investment | Employer's <br> Contribution | Total Return | Year End <br> Value |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 48 | $\$ 61,618$ | $\$ 6,162$ | $\$ 1,848$ | $\$ 23,851$ | $\$ 292,869$ |
| 49 | $\$ 64,083$ | $\$ 6,408$ | $\$ 1,922$ | $\$ 26,733$ | $\$ 327,932$ |
| 50 | $\$ 66,646$ | $\$ 9,997$ | $\$ 1,999$ | $\$ 26,714$ | $\$ 366,642$ |
| 51 | $\$ 69,312$ | $\$ 10,397$ | $\$ 2,079$ | $\$ 29,828$ | $\$ 408,946$ |
| 52 | $\$ 72,085$ | $\$ 10,813$ | $\$ 2,162$ | $\$ 33,235$ | $\$ 455,156$ |
| 53 | $\$ 74,968$ | $\$ 11,245$ | $\$ 2,249$ | $\$ 36,952$ | $\$ 505,602$ |
| 54 | $\$ 77,967$ | $\$ 11,695$ | $\$ 2,339$ | $\$ 41,571$ | $\$ 561,207$ |

At this point, you will have accumulated 7.2 times your annual pay. As you near retirement, your goal is within reach.
Savings goal by age 60: Ten times your pre-retirement income. Assume that your contribution rate remains at 15 percent, your employer's contribution rate remains at 3 percent of your salary, and your pay continues to increase by 4 percent per year. Your investment return remains at 8 percent. Table 4-7 gives you the numbers.

| Table 4-7 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | How to Accumulate 10 Times Your <br> Pre-Retirement Income by Age 60 |  |  |  |  |
| Age | Your Pay | Your <br> Investment | Employer's <br> Contribution | Total Return | Year End <br> Value |
| 55 | $\$ 81,085$ | $\$ 12,163$ | $\$ 2,432$ | $\$ 45,480$ | $\$ 621,282$ |
| 56 | $\$ 84,329$ | $\$ 12,649$ | $\$ 2,529$ | $\$ 50,311$ | $\$ 686,711$ |
| 57 | $\$ 87,702$ | $\$ 13,155$ | $\$ 2,631$ | $\$ 55,573$ | $\$ 758,130$ |
| 58 | $\$ 91,210$ | $\$ 13,682$ | $\$ 2,736$ | $\$ 61,307$ | $\$ 835,855$ |
| 59 | $\$ 94,858$ | $\$ 14,229$ | $\$ 2,845$ | $\$ 67,551$ | $\$ 920,480$ |
| 60 | $\$ 98,652$ | $\$ 14,798$ | $\$ 2,960$ | $\$ 74,348$ | $\$ 1,012,586$ |

At this point, you should be in a good position to consider various alternatives - including retirement, working fewer hours at your current job, or shifting to some other incomeproducing activity that interests you.

These projections are based on assumptions that may differ considerably from your actual experience. Take all these figures as guidelines to help you understand the important features of investing for retirement.

## Sticking with your retirement savings plan for the long haul

The purpose of the previous sample plans is to show you how a specific plan gives you a tangible way to measure your progress each year. It's helpful for you to know some assumptions in the previous savings goal examples:

Money is saved for retirement every year. You should even add to your retirement savings during periods that you're not eligible to contribute to a $401(\mathrm{k})$.
All the money is left in the plan until retirement. None of the money is withdrawn for other purposes.
$\checkmark$ The assumed return requires at least 60 to 70 percent in stock investments (mutual funds or a diversified mix of individual stocks) up to age 55. After age 55, the stock holdings drop to the 50 to 60 percent range. (We explain more about this in Chapter 6.)

Your retirement nest egg comes from your own contributions and your employer's contributions, and the investment return that's earned on these contributions. Table $4-8$ shows this final breakdown among the three sources, using the example of savings progress at age 60 from the previous section.

Table 4-8 Account Breakdown by Source

| Source | Amount |
| :--- | :--- |
| Employee contributions | $\$ 226,173$ |
| Employer contributions | $\$ 57,812$ |
| Investment return | $\$ 728,601$ |
| TOTAL | $\$ 1,012,586$ |

You've probably heard about the magic of compounded growth a term used to explain how money can grow over time. It's very real, but this magic is significant only over long periods of time -

20 to 30 years or longer. This is why starting to save at an early age and sticking with your program is so important. If you wait 10 years before you start, you'll substantially reduce your investment return. The difference can be made up only by a much larger savings rate or by working and saving longer.

Figure 4-1 looks at the cost of waiting to save \$1,000 a year. See how much more the person who starts at age 25 ends up with than the one who waits until age 35 .


Figure 4-1: A quick look at the importance of compounding.

## Chapter 5

## Building Wealth by Taking Reasonable Risks

## In This Chapter

$>$ Identifying some rules of investing
$>$ Appreciating investment risk and how it can help you
$>$ Knowing the basics of managing investment risk
$>$ Understanding that risk can bring rewards
$>$ Deciding how much risk you can stand

$T$he whole reason that you invest your money is so it can earn more money. Otherwise, you may as well just lock your savings up in a safe. (Of course, inflation would eat away at the value of your money sitting in the safe. So investing your money is really the best bet.)

The bad news is that investing money involves a certain amount of risk. The good news is that you can use this risk to your advantage and score a higher return on your money.

Like many things, investment risk isn't that scary after you understand it. This chapter explains the different types of risk involved with your $401(\mathrm{k})$ investments. The goal is not to frighten you away from investing but to make you comfortable by familiarizing you with the unfamiliar. After all, the key to successful long-term investing is building a good plan and sticking to it. Finding the level of investment risk that's right for you will help you stick to your plan.

## Defining Some Investment Basics

In general terms, investment risk refers to the fact that the value of your investment will go up and down over time. Another term
often used to refer to the movement in an investment's value is volatility. Essentially, the more volatile an investment is, the higher its risk.

In order to fully understand these concepts, you need to grasp some investment basics. If you're already familiar with debt, equity, and the concept of diversification, feel free to skip down to the next section, which defines different types of investment risk.

## Debt and equity

Debt and equity instruments are the two types of investments that you use to make money with your money.

When you invest in a debt instrument, such as a bank certificate of deposit (CD), you essentially loan money to an entity for an agreed period of time. In return, you receive regular interest payments, and you get your principal (initial investment) back at the end of the term (maturity).

Debt instruments also include bonds and money market securities. They're often referred to as fixed-income investments, because the amount you earn is fixed and predetermined. The two main investment risks that you face with debt instruments are as follows:
$\checkmark$ Whoever you loan your money to can default on the loan in other words, miss interest payments and/or not pay back your principal. In this case, you lose money. Bonds run the spectrum from what are considered the safest (short-term U.S. government bonds) to the most risky (high-yield or junk bonds, issued by corporations with low credit ratings). The interest paid on a short-term government bond is less than that promised on a junk bond, because the government bond is less risky. But the likelihood that you'll see your principal again is much higher with a government bond than with a junk bond. Agencies such as Standard \& Poors and Moody's give credit ratings for bonds issued by companies (corporate bonds).
$\checkmark$ You may not get the full price back if you try to sell bonds before the maturity date. The situation is fairly unpredictable - the essential thing to remember is that longer-term bonds are more volatile than shorter-term bonds if you try to sell them before they mature.

Equity refers to the stock market. When you put your money in equity investments, you're buying a piece of a company. The amount you gain or lose depends on how well (or poorly) the company does.

Unlike debt investments, equity provides no specified interest or payment.

With equity investments, the main risk is that the company you invest in will do poorly or even go bankrupt. In the first case, the value of your investment goes down; in the second, you may lose all your money. On the other hand, if the company does phenomenally well, so does your investment. That's why equities are generally considered more risky than fixed-income investments. However, the potential rewards (investment gains) of equities can be bigger than with fixed-income investments.

If a stock investment loses value, it's often referred to as a negative return rather than a loss. Technically speaking, it's not really a loss unless you sell the stock. If you hold on to the stock, its value may go back up over time, and you've lost nothing. However, holding on to a stock and waiting for this to happen may be a bad idea, depending on the stock.

## Taking a dip in the mutual fund pool

Mutual funds are a common investment option in 401(k) plans. When you invest in a mutual fund, your money is pooled together with that of many other people and invested under the direction of a professional money manager, or in line with an index.

Mutual fund investments in your 401(k) may include the following broad categories:

```
\checkmark ~ M o n e y ~ m a r k e t ~ f u n d s
\checkmark ~ S t a b l e ~ v a l u e ~ f u n d s
\checkmark ~ B o n d ~ f u n d s
\checkmark ~ S t o c k ~ f u n d s ~ ( U . S . ~ a n d ~ i n t e r n a t i o n a l )
```

We explain these types of investments (and more) in Chapter 6. For this chapter, what you need to know is that the different categories of funds carry different levels of investment risk and expected return. In general, money market funds are the least risky and historically have had the lowest return, while stock funds are the most risky and historically have had the highest return. (Investing is all about tradeoffs!)

Because of the large pool of investor money, mutual funds can invest in a number of different issues, which is known as diversification. Diversification benefits you by lowering your overall risk. (Read more in the "Diversification" section later in this chapter.)

## Return of the mummy . . . er . . . mutual funds

Participants often ask us what return to expect on their 401(k). That's a great question, and we wish we could answer it definitively but we can't. Why? Because the return on your 401(k) investments depends on a number of factors.

We can provide guidelines based on past results of different investment types and generally accepted figures. These are longterm averages based on past performance; you can't assume that your investments will turn in exactly the same return, or that they'll have the same return year in and year out, because they won't. The return will fluctuate. For example, it's reasonable to expect stocks to return an average of 9 percent over a period of about 20 years or more, but it's not reasonable to assume that this will occur over shorter periods such as five years. Historically, stocks have periodically produced a much higher or much lower return during shorter time spans.

Over the long term:
$\checkmark$ Money market funds may be expected to return around 4 to 5 percent.

- Bond funds may be expected to return around 6 to 7 percent.
- Stock funds may be expected to return around 9 to 11 percent.

Because you'll probably hold a combination of investments, the highest overall return that you should estimate for your account as a whole shouldn't exceed 9 percent - and it should be that high only if you're holding at least 75 percent in stock investments. Otherwise, you should reduce your expected return to 7 to 8 percent (or lower if you're really conservative).


The robust stock market performance during the 1990s was great, but it created unrealistic expectations. Many investors came to expect annual returns of around 15 to 20 percent. Returns in this range should never be built into your retirement planning.

## Diversification

The best way to reduce your risk of loss, whether you invest in bonds, stocks, or other investments, is to diversify your investments - in other words, spread your money around. That way if one investment does badly, the others may do well and make up for the loss. Also, if one investment does extremely well, you'll benefit.

Here's an example of how it can pay off to put your money in a combination of different investments.

Manuel and Sophia both have $\$ 5,000$ in their 401(k)s. Manuel chooses to invest his entire balance in a "safe" money market fund with an average return of 5 percent a year. Sophia decides to diversify her $401(\mathrm{k})$ money by investing $\$ 1,000$ in each of five different categories. Her first investment choice fails, and she loses the entire $\$ 1,000$. The second option doesn't do well, and although she doesn't lose any money, she doesn't make any either. Her third, fourth, and fifth investment choices have average to above-average returns.

After 25 years, Manuel has $\$ 16,932$ ( $\$ 5,000$ at 5 percent return for 25 years). Sophia, however, has $\$ 22,070$. How did she do it? Table 5-1 shows the comparative returns.

| Table 5-1 | The Advantage of Diversifying <br> Your Investments |
| :--- | :--- |
| Sophia invests her <br> $\$ 5,000$ as follows ... | And ends up with this ... |
| $\$ 1,000$ and loses it all | $\$ 0$ |
| $\$ 1,000$ at $0 \%$ return | $\$ 1,000$ |
| $\$ 1,000$ at $5 \%$ | $\$ 3,386$ |
| $\$ 1,000$ at $8 \%$ | $\$ 6,849$ |
| $\$ 1,000$ at $10 \%$ | $\$ 10,835$ |
| Total | $\$ 22,070$ |

If Sophia had invested her entire account in the first option, she would've lost everything. By spreading her money over different investments, she overcame that loss and even ended up making more money than Manuel did.

## 92 Part II: Finding an Investment Strategy That Lets You Sleep



The most efficient way for most 401(k) participants to diversify is often through collective investment funds such as mutual funds. Mutual funds invest in a number of different companies or other investments. They're run by professional money managers who decide what investments to hold. Some mutual funds are index funds, meaning that they hold most or all the same stocks in an index such as the S\&P 500 (which contains 500 of the largest companies in the United States). The manager doesn't pick stocks for index funds. The other types of mutual funds are actively managed funds in which the fund manager buys and sells stocks in order to try to get a better return than with an index.

Even investment professionals dispute whether you get more for your money with an actively managed fund or whether you're just as well off, if not better off, with an index fund. There's no firm conclusion except that you'll pay higher fees for an actively managed fund (see Chapter 2 for more about fees).

## What goes up ...

Most people have heard of the great stock market crash of 1929 that heralded the beginning of the Great Depression. That drop was 86 percent from the high point to the low point. The following table looks at the biggest market drops since the beginning of the $401(\mathrm{k})$ in 1980, as measured by the S\&P 500 index of 500 of the most influential companies in the United States.

Date of market peak

Nov. 28, 1980
Aug. 25, 1987
July 16, 1990

Decline in
S\&P 500 index before recovery
27\%
34\%
20\%

Date of market peak

July 17, 1998
March 24, 2000

Decline in S\&P 500 index before recovery 19\%
$35 \%$ as of June 27, 2002*
*No definitive recovery had begun as of the time of writing.
These percentages reflect the average change for the 500 companies in the S\&P 500 index from a high point to a low point, usually over several months. Some stocks fare better than the general market decline, and some fare worse. Because some stocks fare worse, the stocks of some S\&P companies actually dropped by a lot more than 35 percent during the decline that began in 2000. The big problem with owning a single stock is that your company may be the one that drops by 80 percent (or more) during such a period. This decline can be a big problem if it happens a year or two before you need your money.

Here's why it's useful to own a mutual fund. Say you buy shares in a mutual fund that owns only stocks. The value of that fund could conceivably increase on a day that a single stock drops by 30 percent, if the fund doesn't own that stock. Even if your fund does own this particular stock, your account value may drop by only a few percentage points for the day - compared to 30 percent for a person who owns only this one stock.

It's usually not enough to own just one mutual fund. In Chapter 6, we explain how to put together a good combination.

## Classifying Different Types of Risk

Several types of risk come into play when you're investing in a 401(k). This section explains what those types are, but keep in mind that this isn't an exhaustive list of all kinds of risk.

## The risk of losing more than you can stand

No one wants to lose any money, but folks are especially fearful of losing more than they can afford. You probably won't lose everything in your $401(\mathrm{k})$ account, but losing to the point of severe pain is a very real possibility (especially if you don't diversify your investments).


The amount of risk you can take depends to a large extent on how soon you'll need your money - your time horizon. If you won't need the money for 20 or 30 years, it doesn't matter if the stock market goes into a slump for a few years. Historically, the market has always recovered, so if you hold on to your investments, they'll probably rebound (providing that you had a good reason to buy them in the first place).

If you'll need your money in five years or less, however, you may not have time to recover from a drop in the stock market. This is when you need to move some of your money out of high-risk investments and into more stable investments that safeguard your principal, such as money market funds, stable value funds, and shorter-term bonds.


A common mistake 401(k) investors made during the late 1990s was putting too much into certain stocks that were doing extremely well - high-tech companies such as computer and software producers come to mind - instead of diversifying their investments.
(They may have thought that they were diversifying by buying a high-tech mutual fund instead of stock in a single company, but that doesn't help when the entire industry goes kaput.) When those companies' performance began to suffer, many portfolios lost a lot of value. Younger investors picked themselves up, dusted themselves off, and started all over again with diversified portfolios. But investors within a few years of retiring had a completely different outlook. They probably had to delay retirement.

Even if you put together a portfolio that contains good, solid performers, you're at the mercy of general economic conditions. This type of risk is known as systematic risk, or market risk. It's the risk that your investments will decline in value simply because current economic conditions are making most investments decline in value. These general declines have happened periodically over history and will happen again. You need to look carefully at your investments. If you decide that your investments are the right ones for you, hang on and ride it out. Historically, the stock market has always recovered, although sometimes it can take a few years. If you're an investor nearing retirement, be sure to have enough of your investments in less risky securities that'll keep your principal intact in case you need to tap it.

## The risk of losing your entire investment

The stock market slump that began in 2000, combined with the much-publicized retirement savings disaster at Enron Corporation, has caused many people to worry about losing all their retirement savings. We've heard from a number of workers who want to know if they should pull their 401(k) money out of stocks and invest in something "safer."

Before you do something rash (such as pull all your 401(k) money out of stocks), you need to understand that there's no such thing as a completely risk-free investment. Even if you bury your money or hide it in your mattress, your dog can still dig it up and eat it for lunch, or the money can be stolen. Even the investments most people consider completely safe - FDIC-insured bank savings accounts and certificates of deposit (CDs) - are only guaranteed to a certain point. They still carry some risk of loss.

The FDIC (Federal Deposit Insurance Corporation) is federal government insurance that protects your money up to a certain amount ( $\$ 100,000$ per person as of 2002) should the bank where you parked your money in a savings account go bankrupt. Not all
financial institutions are FDIC-insured. Mutual funds are never covered by the FDIC. What's more, the FDIC doesn't have enough resources to back its guarantees in a total economic collapse.


The important fact is that you'll probably never lose all your money, even if it's all invested in stocks. One important exception is if you have too much invested in your own company's stock or any other single stock. This type of investment can be a ticket to either riches or rags, as we explain in the next section.

## The risk of owning too much company stock

A number of $401(\mathrm{k})$ investors face the very real risk of holding too much stock in their employer's company. Company stock may be available in a number of ways:
$\checkmark$ Your employer can use it to make matching contributions to your account.
$\checkmark$ Your employer can give it to you as an additional contribution.
$\checkmark$ Your 401(k) may offer it as an investment option for your own contributions.


Employers who contribute company stock to a $401(\mathrm{k})$ as a matching contribution or other contribution may place restrictions on when you can sell that stock - you may only be able to sell it when you turn 55, for example. This restriction puts you in a difficult situation, because you won't be able to diversify that part of your account even if you want to. In this situation, remember two things:

Y Your other investments need to balance out the fact that you have so much invested in your company's stock.

- You shouldn't increase your holdings by investing your own contributions in company stock.


The second point is very important. The fact that many companies prospered throughout the 1990s, and their stock values consistently increased, led a number of employees to invest some or all of their own contributions in company stock. Just how bad an idea this is became apparent in 2000, when the stock market began to decline and many investors lost big chunks of their retirement accounts. The old adage about not putting all your eggs in one basket couldn't be more true.

## 96 <br> Part II: Finding an Investment Strategy That Lets You Sleep

We do recognize that it can be hard not to invest a lot in your own company. After all, you work there, and you want to support the company, as well as feel that you have an ownership stake in how well it does.

What's more, you may have gotten a big sales pitch from senior management on the benefits of owning company stock. Many senior managers want employees to own as much company stock as possible.

Interesting psychology is at work here. According to at least one study, 401(k) plan participants who receive a matching contribution in company stock are more likely to also invest their own contributions in company stock if such an option is available in their plan. So, if your company matches your contribution in stock, you're more likely to direct your own contributions into company stock, when really, the rules of diversification dictate that you should put your own contributions somewhere else.

Not to be ignored is the possibility that your buddies at work may laugh at you for investing your money in mutual funds when they're making a ton of money investing in company stock. The pressure to not miss out on this "once-in-a-lifetime opportunity" can be great. One solution: Ignore your buddies.


If your employer gives you company stock, you certainly shouldn't look a gift horse in the mouth. Take it! But think twice before you invest your own money in company stock. The risk of a major loss is simply too high. It wasn't just Enron or dot-com companies that tanked during the market downturn that began in 2000. Many large, well-known companies watched their stock prices drop by more than 50 percent. Every stock's value goes down at some point it seems to be only a question of when and by how much. It's virtually impossible for a stock to only go up for 20 years or more.

Unfortunately, many 401(k) investors with a lot of company stock learned this lesson the hard way, at the worst time - in their 50s and nearing retirement. For years they saw the value of their accounts grow as they rode the company stock rocket. Then, seemingly overnight, they watched much of what they had gained flame out and disappear.


A single stock has much more potential to move up and down than a diversified collection of investments. You should keep your ownership of company stock at the lowest level permitted by your plan in order to avoid unnecessary risk. This type of risk is called company risk or unsystematic risk, and the only way to reduce or eliminate it is to diversify your investments.

## Congress wants to protect us from ourselves

Because individual stock investments are so volatile, and because participants aren't always the ones who choose whether company stock ends up in their 401(k) plans, some members of Congress introduced bills in 2002 to limit the amount of company stock that can be held in a $401(\mathrm{k})$. The catalyst for Congress was the bankruptcy of Enron Corporation, the Houston-based energy trading company that collapsed in late 2001, taking the retirement accounts of many of its employees with it. A main reason for the big losses in retirement accounts was that Enron employees held very high percentages of Enron stock, and when it became worthless, so did their accounts. Not only did the company match these employees' contributions in company stock but employees also invested their own money in the stock.
It didn't appear likely at the time of publication that any legislative changes would be enacted during 2002, but this issue will likely resurface in Congress. What is certain is that the real concern for you as a $401(\mathrm{k})$ investor is how company stock affects your overall mix of investments - your asset allocation. (We explain this concept in more detail in Chapter 6.) Essentially, investing a large percentage of your money in a single stock can throw your portfolio off balance. If the stock does very well, you may be fine, but if it does poorly, you risk losing a lot of money.

## The risk of not having enough money to live on during your retirement

Considering the risks outlined in the previous sections, you may wonder why investing your money in anything other than a relatively safe bank savings account is even necessary. The answer is that you need to beat inflation, the gradual rise in prices over time. You may be able to avoid many investment disasters, but inflation isn't one of them.

If prices rise by an average of 3 percent a year - which is a conservative estimate based on past history - your money will lose more than 60 percent of its value over 30 years. This means that the $\$ 100,000$ you have today will be worth only $\$ 40,000$ when you need it at retirement 30 years from now. This loss is just as real as waking up tomorrow morning to find that your account value has dropped by 60 percent. Ouch!

You have to invest your 401(k) contributions - it's the only way to beat inflation.


Your 401(k) retirement nest egg must come from your savings, any employer contribution, and investment income (return).
As we explain in Chapter 4, you'll probably have other sources of retirement income besides your 401(k), but it'll still be an important part of your income. The more your 401(k) investments earn, the less you'll have to contribute to the account.

## Understanding the Risk-Reward Relationship

When you think about it, retirement investing is a 40- to 60-year event that includes both your working and retirement years. You can't afford to accept a "safe" return over this time period, because it may not keep up with inflation.
"Simple," you may be saying. "All I have to do is invest in something risky, and that will bring up my average return." Unfortunately, it's not that easy. Although you generally do have to take on more risk to get a higher return, or reward, that doesn't mean that every highrisk investment will give you a high return. Some may fail miserably.

You need to choose reasonable investments that are right for your goals as well as for your personal risk tolerance. Investments with the same level of risk can produce very different returns. Your goal is to find the investments that will give you the best returns for your risk level.

We explain general guidelines in Chapter 6. You can also hire a financial planner to do an analysis for you or use financial planning software and services available over the Internet. We list financial planning resources at the end of Chapter 6. A financial planner (or software) will run a number of different scenarios through the computer and come up with a combination of investments that should give the greatest potential return for a given level of risk. This would be nearly impossible to do on your own.

As an example of why it's so important to try to get the best return possible at your desired risk level, Figure 5-1 shows the impact of an additional 3 percent return on your end balance.


Figure 5-1: How returns affect investment growth.

As you can see, a 9 percent return results in an end balance of $\$ 273,000$ after 30 years versus $\$ 158,000$ at a 6 percent rate of return. The 3-percent-higher return generates a 73 -percent-higher 401(k) nest egg and a 73-percent-higher retirement income. To achieve the same result over 30 years at the lower rate of return, you'd need to make an annual contribution of $\$ 3,460$ instead of $\$ 2,000$.

## Deciding How Much Risk You Can Stand

The key to managing risk is knowing how much you can tolerate. When you know how much risk you can handle, you can find investments that you can live with over the long term. If you panic and sell your investments following a price plummet, all you'll do is lose money. If you can stick it out and not sell the investments when they're low, you'll be in better shape.

We want to clear up a common misconception. The amount of investment risk that's right for you has nothing to do with whether you like to go bungee jumping on weekends or drive race cars as a hobby. When it comes to investments, the amount and type of risk you can tolerate has more to do with your time horizon than with your personality (although personality does factor in to a degree). Your time horizon is the length of time between now and when you'll need your money. The longer your time horizon, the more time your investments have to increase in value, even if they have a bad year or two. That generally means that you can take on more investment risk, as part of a carefully thought-out investment strategy, if you have 20 or 30 years until retirement than if you have, say, 5 years until you'll need your money.


Can you handle drops of 20 percent, 30 percent, 40 percent, 50 percent, or even more in the value of your account? Answering questions like this will help you determine whether to invest in risky stocks or safer bonds. Imagine yourself with a retirement account of $\$ 100,000$ that drops to $\$ 50,000$ in value. Would you be able to hang on, or would you, like so many others, be tempted to sell those investments and put the money in lower-risk investments? If you do sell, you'll have to dramatically increase your contributions to make up both the loss and the lower investment return you'll get in the future. Many investors are comfortable owning stocks when things are going well but tend to sell when stocks are down. This is generally the wrong thing to do.

Table 5-2 illustrates the risk-reward tradeoff. It contains results of the S\&P 500 stock index and the Lehman Government Intermediate Bond index over a nearly 30 -year period from February 1973 through June 2002, alone and in combined portfolios. You can see how higher average return goes hand in hand with higher risk (illustrated by the worst return over a 12-month period). The table also gives you an idea how much one dollar invested in the different combinations would have grown by mid-2002.

| Tabl | Illustration of Risk-Reward Relationship |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Results <br> Feb. 1973- <br> June 2002 | $100 \%$ S\&P 500 (stock) | 80\% stock/ 20\% bond | 50\% stock/ 50 \% bond | 20\% stock/ <br> 80 \% bond | 100 \% <br> Lehman <br> Gov't. <br> Intermediate <br> Bond (bond) |
| Average 12-month return | 11.39\% | 11.04\% | 10.32\% | 9.37\% | 8.62\% |
| Worst 12-month return | -38.93\% | -31.79\% | -19.84\% | -6.24\% | -1.75\% |
| Return on $\$ 1.00$ | \$28.82 | \$21.74 | \$17.97 | \$13.93 | \$11.35 |

The whole point of finding a comfortable risk level is that it helps you stick to your investment plan. Investing more aggressively (taking more risk) gives you a chance of getting a higher return, but it may also mean more ups and downs than you want. It's a trade-off. The bottom line is that you have to feel comfortable with the investments you choose.

Long-term investing gives you a lot of time to recover from market slumps. The important thing is to choose good, solid investments and reduce your stock holdings as you approach retirement, when you'll have to start generating an income from your investments. (Within your stock investments, you can also shift from growth stocks toward value stocks, which tend to be less volatile.) "What goes up, must come down" is an old saying, but it's one that many 401(k) investors found to be true during the continuing market slump of the early 2000s.

## Chapter 6

## Selecting Investments

## In This Chapter

- Understanding what all those investment names mean
$>$ Finding the right combination of investments
$>$ Comparing sample asset allocation pies
$>$ Knowing where to go for help

$w$hen you drive somewhere, what kind of ride do you like? A bumpy one that rises and dips like a roller coaster, leaving you with a stomachache by the time you reach your destination? Or a smooth one that lets you arrive feeling rested and relaxed? Unless you truly enjoy discomfort, you probably prefer the smooth ride.

Investing for retirement is a lot like car rides. And we have news for you - diversifying your investments (choosing a range of different ones) puts you on a smoother investing path than not diversifying. How? Different types of investments, such as stocks and bonds, tend to move up and down in value at different times. If you choose several investments, one may go down in value as another begins to go up.

You may ask, "Why not just put everything in the one investment that performs better than the others?" Great idea, in theory. But in practice, you can't possibly know which investment will perform better than others. As all mutual fund companies will tell you, past performance does not guarantee future results. (They don't tell you this just to be nice, either. They're required, by law, to inform you of this.) Just because a fund performed well over the last year, or even several years, doesn't mean that it will continue to do so if you invest all your money in it. (According to Murphy's Law, as soon as you put all your money into it, it will do terribly.)

Your 401(k) plan probably lets you choose from up to a dozen different investments, or possibly more. How can you choose? You can close your eyes and point or throw darts, but that's not advisable. What you need is a strategy.

This chapter outlines the main categories of investments likely offered by your 401(k) plan, how to compare and combine them so that they're likely to keep increasing in value, and where to go for more help.

## Looking Over the Investment Menu

When your employer set up your 401(k) plan, it chose a selection of investments to offer. If you're new to investing, the list may appear baffling - like trying to order dinner from a menu written in a foreign language. Although making a mistake while ordering a meal may set your stomach back for a day or two (Pan-fried calves' brains? Oops, I meant to order risotto!), choosing the wrong 401(k) investments can set back your retirement plans considerably.

Most investments offered by your 401(k) plan are likely mutual funds. Mutual funds pool together money from many investors and use that money to buy a variety of investments. Different types of mutual funds exist, such as stock funds, bond or other fixed-income (non-stock) funds, and money market funds, which are generally named after the type of investment they favor. Within those broad categories are more specialized mutual funds, as we describe in the following sections. Mutual funds give you an advantage as an individual investor because they let you invest in many more investments than you probably can on your own.

Your plan may also offer non-mutual fund investments, such as company stock or a brokerage window, which we describe later in this chapter.

As you look at your list of $401(\mathrm{k})$ investment choices, you may wonder whether to invest a little bit in each fund or just choose the one that performed best during the past year. The answer is likely somewhere in between. Your job is to decide what combination makes sense for you.

How do you do that? First you need to understand the degree of risk and potential return of the investments. (We discuss these concepts in detail in Chapters 4 and 5.) Here, laid out roughly from lowest risk to highest (based on past performance), are broad categories of investments often found in 401(k) plans:

[^0]$\checkmark$ Stock funds
$\checkmark$ Company stock

## Money market funds: Show me the money

Money market funds are considered the least risky investments. They invest in very short-term debt instruments (called cash equivalents) issued by banks, large U.S. companies, and the U.S. government. A fund earns interest on the instruments it holds, but the instruments themselves do not increase or decrease in value. Your money isn't expected to lose value in money market funds, and it will probably gain a bit.

These funds generally have low returns, and they shouldn't be used for long-term investing, because they probably won't beat inflation over the long run. However, they can be a good place to park your money temporarily while you try to figure out what to do with it. Also, you may want to invest in one as part of a diversified portfolio if your plan doesn't give you another fixed income (non-stock) option, or if you desire added stability, especially as you approach retirement.

## Guaranteed investment contracts and stable value funds

Guaranteed investment contracts (GICs) and stable value funds are fixed-income investments commonly backed by insurance companies or other financial institutions. Many 401(k) plans include these as "conservative" investments, but they aren't widespread outside retirement plans. Their values don't fluctuate, such as a bond fund's sometimes does (see the next section), and you generally receive a predetermined and fixed rate of return over specified periods.

You can consider these an alternative to bonds for the fixed-income portion of your investments. But remember that even though the word "guaranteed" may appear in the name, they aren't fully guaranteed. If an insurance company (or other financial institution) backing the investment fails, or if another asset held in the portfolio is in default, you may lose money. Also, your return could decline in
a period of rising interest rates and increasing inflation. The longterm return of stable value funds has generally been below that of bond funds but higher than money markets.

## Bond funds: Single portfolio seeks stable relationship

Bond funds invest in U.S. government bonds and/or corporate bonds (bonds issued by companies). The risk level and potential return of the fund depends in part on whether it holds more long-term bonds (that mature in 20 to 30 years), medium-term bonds ( 5 to 10 years) or short-term bonds ( 1 to 3 years). In general, funds holding mostly short-term bonds are thought to have lower risk and lower return than funds holding intermediate- and long-term bonds. Another factor that affects your investment results is the quality of the bonds the fund owns. Junk bonds have a potentially higher return but also potentially greater losses.


A fund company isn't going to call its fund that invests in junk bonds a "junk bond fund." It will more likely be called a "high-yield fund." Read the prospectus or other material carefully before actually investing your money in any fund.

In a $401(\mathrm{k})$, you generally invest in a bond fund to add stability to your portfolio. Sticking to less-volatile short-term and intermediateterm bonds makes sense. The name of the fund may indicate what kinds of bonds it holds; otherwise, you can look at the list of bonds in the fund. (Short-term bond funds sometimes have "low duration" in their name.) Like stock funds, bond funds can be index funds or actively managed funds. We explain these terms in the section "Stock funds: A feather in your cap" later in this chapter.

Changes in interest rates can affect the return of a bond fund. (The relationship isn't what you may think, though - when interest rates rise, bond values may decline, and vice versa.) In addition, a company that issues a bond (a corporate bond) may go kaput. If you invested in a fund holding those bonds, it can affect your return.


Some municipal bonds are tax-free investments - the interest earned isn't taxed. Although these may be good investments outside of a 401(k) or other tax-deferred account, don't buy them in your 401(k); you'll be wasting the tax advantage. Money in a 401(k) grows tax-deferred, but you have to pay income tax when you take money out, whether it was invested in a tax-free bond fund or not.

## Balanced funds: One-stop shopping

Balanced funds are mutual funds that invest in a set mixture of stocks and bonds, and are generally designed for one-stop shopping. Investment professionals choose the balance of stocks and bonds for balanced funds. (The mix is usually around 60 percent stocks and 40 percent bonds, but the combination may vary.)

Life-cycle or lifestyle funds are a type of balanced fund aimed at a particular age group, based on the number of years until retirement. These funds are designed to be most effective if you choose one that's right for you and invest only in that fund rather than mix it with other investments.

## Stock funds: A feather in your cap

Stock funds, also called equity funds, invest mostly or entirely in the stock of U.S. and/or foreign companies.

A number of factors influence individual stock prices, such as
$\checkmark$ Political events in the United States and around the world
$\checkmark$ Unpredictable events, such as the $9 / 11$ attacks, or natural disasters, such as an earthquake
$\checkmark$ The company's revenue and profits
$\checkmark$ A change in company management
$\checkmark$ New products recently introduced by the company
$\checkmark$ The company's prominence within its industry
$\checkmark$ The industry climate
$\checkmark$ General market trends
$\checkmark$ The opinion of large institutional investors, such as mutual fund managers
$\checkmark$ The opinion of key analysts
Because so many things can impact the price of a stock, you may wonder why in the world you should invest your retirement savings in something so uncertain. The answer is that, historically, stocks have provided the highest average investment return over the long term. Also, by investing in a mutual fund rather than a single stock, you can reduce your risk level.

## Active versus passive management

Some stock funds are index funds that invest in companies that make up a stock index. Many stock indexes exist; one of the best known is the Standard \& Poors 500 ( $S \& P 500$ ), which is comprised of 500 large U.S. companies considered leaders in their fields (or economic sectors). Contrary to popular belief, the companies that make up the S\&P 500 are not necessarily the 500 largest U.S. companies. The S\&P 500 is often used as a broad measure of the U.S. economy.

Fees for index funds are generally lower than for managed funds, because index fund managers don't spend a lot of time making decisions about what stock to buy and what to sell. Index funds are sometimes referred to as passively managed funds. (We give more examples of indexes in the section "Mistake \#2: Comparing different types of funds" later in this chapter.)

An actively managed stock fund is a different cup of tea. This type of fund is run by a fund manager who tries to get better returns than the index that applies to the fund. (For example, the S\&P 500 is an index for measuring the performance of large-cap stocks; we explain large-cap stocks in the following section.) The manager of an actively managed large-cap stock fund wants to earn a better return than the S\&P 500, but he doesn't worry about doing better than a bond index, for example, because that's a different type of investment. To beat the index, the manager needs to pick stocks that he expects will do especially well. Because of additional operating costs in managed funds, the manager must beat the index by 1.5 to 2.0 percent in order for your return to be the same as if you had invested in an index fund. That's a big hurdle. Studies have shown that most actively managed funds don't beat the indexes over time, but debates still rage in the investment world as to which is better - active or passive management.

You may decide to choose an actively managed fund, even if it doesn't achieve as high a return as its benchmark, if the stocks selected by the manager have lower risk than those in the benchmark. For example, Ted, at age 60, prefers to invest in actively managed stock funds that have lower risk than the S\&P 500 index. The fund prospectus and third-party sources such as Morningstar or Value Line tell you how much risk the manager takes.

## Capitalizing on a company's assets



Stock funds often concentrate on companies of a certain size or capitalization. (Capitalization, or market cap, refers to the number of shares on the marketplace, multiplied by the price per share. If a company has issued 10 million shares of its stock, and the stock is valued at $\$ 10$ per share, the company's market cap is $\$ 100$ million.)

Generally, large-cap refers to companies with capitalization more than $\$ 10$ billion, such as Microsoft or Wal-Mart. Small-cap companies have capitalization under about $\$ 1.5$ billion, such as Jack In The Box or Ethan Allen Interiors. (Yes, we realize that $\$ 1.5$ billion is hardly small change, but these definitions are relative. Kind of like the coffeehouse whose smallest size drink is labeled "tall.") These definitions are somewhat fluid (different experts may use different cut-offs). What you need to know is that large-cap companies as a whole are considered less volatile investments than small-cap companies, which tend to be newer, less proven companies. However, small-cap companies are generally seen as having greater potential for growth (as well as for failure).

There's also a mid-cap category for companies that are bigger than small-caps but not big enough for the big leagues. This category is very fluid. It may not be included in an asset allocation recommendation you get from an advisor, because a mix of large and smallcap companies may give you a similar investment result.

If you want to go whole hog, you can further divide stock funds into growth and value funds. (A mutual fund that mixes growth and value stocks is often referred to as a blend.) Here's the skinny on growth and value funds:
$\checkmark$ Growth funds invest in companies that are expected to earn a lot of money over a sustained period, such as some technology companies (Microsoft) or pharmaceuticals firms (Pfizer). They generally plow their earnings back into the company rather than pay dividends to shareholders. The price of these stocks tend to be high compared to the companies' earnings, but the expected revenue and profit growth attracts investors.
$\checkmark$ Value funds invest in companies that are seen as bargains their stock prices are low compared to their assets, revenues, and earnings per share. The stock price may be low because the company is in a sector (part of the economy) that is going through a slump but is expected to recover, such as energy companies or some telecommunications and technology companies in 2002 (ExxonMobil or Verizon Communications).
Another reason for a low stock price may be that the company or industry has fallen out of favor with investors for a reason unconnected to its performance - similar to a fickle public's treatment of some rock stars and professional athletes.

Put all those categories together, and you end up with funds called "Company X Small-cap Growth" or "Company Y Value Equity." The first would likely invest in small-growth companies, and the second in value stocks - potentially from a company of any size.


There's obviously a lot more to a mutual fund than its name. In fact, the name may be misleading. You should look at the fund's prospectus (a description of the fund that you can get from your employer, plan provider, or the fund company) to see where the fund is invested. Small-cap growth funds may also have investments in bonds and cash. Why does that matter? Say you've figured out that 15 percent of your money should be in bonds, and you've already invested that much in a bond fund. If the stock fund you invest in also holds bonds, you'll end up with more bonds than you want, which probably means a lower return over the long run.

You should also check how an independent third party such as Morningstar or Value Line identifies the fund. (We explain more about these and other services in the "Seeking Help from the Pros (and We Don't Mean Julia Child)" section at the end of this chapter.)

## International investing

Your 401(k) plan may offer a mutual fund (or funds) that invests in companies outside the United States. Foreign investments may move up and down at different times from the U.S. stock market, meaning that international investments can help diversify your portfolio. An "International" fund generally invests only in non-U.S. companies, while a "Global" or "World" fund may also include U.S. investments.

International funds may be named after the specific region they invest in: Europe, the Pacific Rim, Latin America, or Emerging Markets (developing economies), for example. Be sure to research any fund (before you invest in it) to find out exactly what it holds. Also, read up on the politics and economics of the countries the fund invests in - instability increases the risk to your investment. For example, Emerging Markets investments generally are riskier than investments in developed economies such as Europe.

## Company stock funds: Don't get burned



Your 401(k) plan may let you invest your contributions in your employer's stock. Although doing this can seem like a good idea, especially if your company is the greatest, think twice before you decide whether to do it. Company stock isn't a diversified investment such as a mutual fund. Although your company's stock may do really well, it can also do really badly at some point. (Think Enron.)

Enron investors did very well until the year the company collapsed. Although the collapse was a big deal for Enron employees, it wouldn't have mattered so much to the rest of us if Enron were the only large company that saw its stock value tank. Unfortunately, it wasn't. WorldCom and Global Crossing were but two other big companies whose stock hit the skids. The stocks of many other employers dropped by more than 50 percent during the period from 2000 to mid-2002. Employees who thought they were winning by investing heavily in company stock for many years suffered major losses at the worst time - when they were close to retirement and needed their money. Remember your parents' admonition about not playing with matches? It's the same with company stock. Hold it too long, and eventually you'll get burned.

If you have a lot invested in your company's stock, it may pull your entire account down, even if you also have money invested in mutual funds. Many financial planners advise holding no more than 10 percent of your retirement investments in company stock (including the portion your employer may give you as a contribution), and some encourage investors to sell all their company stock and buy mutual funds instead (if their plan's rules allow them to follow this advice). See Chapter 5 for more on the risks of company stock.

## Brokerage window: Don't fence me in

Like cowboys living out on the range, some 401(k) investors don't like to be fenced in. They want to invest in more than just the options chosen by their employer. To make these employees happy, some companies offer a brokerage window. This isn't really a class of investment, such as the others described in this section, but we include it here because it's a way of investing in a $401(\mathrm{k})$ plan that is becoming more common. The "window" may let 401(k) participants invest in any stock, bond, or mutual fund they like, not just the ones offered by their plan.

If your plan offers a brokerage window (sometimes called a selfdirected option), you probably have to pay extra for it. Also, some companies don't give you complete freedom, because they don't want you to use a brokerage account to day-trade (buy and sell investments frequently, trying - and usually failing - to make a quick buck) or to invest all your 401(k) money in a single stock. Ted advises employers who offer a brokerage window to limit investments to professionally managed mutual funds.

Using a brokerage window puts more responsibility on you to research your investments to make sure that they're right for you.
We recommend getting help from a reputable advisor if you choose to go this route.

## Different Strokes for Different Folks

Different types of funds serve different investment objectives. Broadly speaking, objectives can include growth (capital appreciation), income, and capital preservation (which we explain in just a second).

Long-term investors (those with at least 5 to 10 years before they may need the money) usually invest primarily for growth. When you invest long-term, you don't want an immediate return such as interest or dividends. Instead, you want your investments to increase in value, so that when you're ready to sell them, they'll be worth a lot more than you paid for them. You're willing to take on a certain amount of risk for the possibility of higher return. The most common investment for this type of strategy is stocks - of all kinds.

Within 5 to 10 years of retirement, you can cut back your level of stocks by shifting into less volatile investments, such as bonds and stable value funds, in order to reduce your risk. You may also shift the remaining stock portion of your portfolio from more risky stocks (generally growth-oriented companies) to less volatile ones (generally value-oriented companies). This is a capital preservation strategy. You want your money to grow at a rate that will at least beat inflation, but you want to reduce your risk of losing money. The long-term return of this portfolio will probably be lower, but, at this point, you're more concerned with preserving your capital.


Some retirees who are very concerned about preserving capital during their retirement years will typically invest to generate an income through interest and dividends. A problem with this strategy is that you have little or no hedge (protection) against inflation. In addition, you can't count on companies that pay high dividends to always do so. Dividends are one of the first things to be cut when profits shrink. You need income during your retirement years, but you can collect it in other ways. Ted recommends using an automatic
withdrawal plan from mutual funds or an annuity rather than trying to find investments that will generate enough income through interest and dividends. (We explain this strategy in detail in Chapter 9.) In any case, you should probably still keep at least 25 percent of your money in stocks, because retirement can last for 20 years or more, and your money needs to keep growing.

## Baking Your Asset Allocation Pie

Figuring out the right investments for you is an important part of $401(\mathrm{k})$ investing. It requires some time at the outset, but when you're done, you shouldn't have to spend too much time on managing your account, except for periodic maintenance.

The first step is to figure out what percentage of your investments should go into the different asset classes. The five asset classes that are generally used are large-cap stocks, small-cap stocks, international stocks, fixed income (bonds, GICs, and stable value funds), and "cash" (money market funds). Pie charts are the financial planners' preferred method for illustrating asset allocation, or how to divide your money among different investments. Figure 6 - 1 shows a sample allocation for someone 25 years from retirement who is a moderate investor (not too conservative, not too aggressive).


Figure 6-1: Pie chart with 55\% large cap, 20\% bonds, 10\% small cap, and 15\% international.

Everyone's situation is unique, and the sample allocation that we show here may not necessarily represent the right strategy for your situation. You may need or want something more aggressive (risky) or less risky. These are guidelines to put you in the ballpark whether you end up sitting behind home plate, in the bleachers, or somewhere in between is up to you.

The right asset allocation for your situation depends on a number of factors, including your time horizon, retirement goals, and comfort level with investment risk, which are concepts we discuss in Chapters 4 and 5 . It also depends on whether you expect your $401(\mathrm{k})$ to be your principal source of retirement income, or whether you have other substantial resources to rely on, as well. (If you have other resources, you may be able to take less risk with your 401(k) and still meet your retirement goals.) You and your next-door-neighbor may both be 25 years away from retirement, but she may require a more conservative portfolio, while your situation may warrant one that's more aggressive.

For example, someone with a 25 -year time horizon who doesn't mind investment risk may decide on a 401(k) allocation that's 100 percent stocks, as shown in Figure 6-2.


Figure 6-2: Pie chart showing 65\% large cap, 15\% small cap, and 20\% international.

Someone else with the same time horizon who is risk-averse may move more into bonds and even a money market (cash) investment, as shown in Figure 6-3.


Figure 6-3: Pie chart with 50\% large cap, 5\% small cap, 10\% international, 30\% bonds, and 5\% cash.

After you determine an appropriate asset allocation for you, the next step is to determine which funds in your $401(\mathrm{k})$ plan match up with the asset classes that you want to invest in, and decide which funds to invest in. The following section, "Check your ingredients and avoid these common mistakes," gives some tips for choosing investments.

How you go about completing these steps depends on whether you prefer to do things yourself or seek professional advice, as well as on what resources are available to you at work. In the "Seeking Help from the Pros (and We Don't Mean Julia Child)" section at the end of this chapter, we give suggestions for where you can go for help.

## Check your ingredients and avoid these common mistakes

When you decide on an asset allocation, you need to split your money among the funds available in your 401(k) to achieve the desired allocation. If you have already contributed money to your

401(k), you may need to move it into different funds to achieve the mix that you want. You should also make your new contributions in these proportions.


With a 401(k), you can move money among investments without paying fees. Most plans let you move money when you want to, although some may restrict you to a few dates per year.

When choosing specific funds, be sure to focus on the right information. Following are some common mistakes 401(k) investors make.

## Mistake \#1: Basing investment choices on the past performance of the investments

Good results are often fleeting. Many of the funds that appear on "Top 10 " lists aren't repeat stars.

Many technology funds were top performers prior to 2000. They then dropped into the worst-performing category in 2000 and early 2001. One mutual fund that invested in small Japanese technology companies gained 100 percent during the first six months of 1999, and 114 percent in the second half of 1999. If you were shopping around for a fund back then, boy, would that have looked like a winner. But (there's always a "but," right?) when technology companies took a dive in 2000 , the fund dropped by 71.8 percent. If you'd been paying attention to analyst predictions about the tech sector and had looked at the companies held by the fund, you would've been forewarned. You probably would have chosen another fund and ended up better off. That said, we recently ran across an Internet message board with entries from three investors who were in the fund in April 2000, when the fund was nosediving. Two of the three said that they were hanging on to the fund because they thought it would go back up. (The fund no longer exists, by the way.)

## Mistake \#2: Comparing different types of funds

You can't compare apples with oranges, and you can't compare stocks with bonds. You must compare a fund's performance to that of others in its peer group (similar types of funds).

Identifying a fund's type can be difficult. The name won't always help you. Looking at a prospectus for the fund should help you figure out a fund's type, but it still may not be totally clear. An independent source such as Morningstar, Value Line, or Schwab can be your best bet for finding out what the fund invests in.

To measure your mutual fund's performance against a standard, use an index. Indexes are made up of a large number of companies that fall into the category being measured, so they provide a good indication of how the category is doing. Several financial institutions have created indexes to measure different categories of investments. The main companies with indexes are
$\checkmark$ Standard \& Poors (S\&P); www. standardandpoors.com
$\checkmark$ Barra; www.barra.com
$\checkmark$ The Frank Russell Co.; www.russel 1 .com
$\checkmark$ Wilshire Associates; www.wilshire.com
$\checkmark$ Morgan Stanley; www.morganstanley.com
$\checkmark$ Lehman Brothers (for bonds); www. lehman.com
You need to make sure that you measure the mutual fund's performance against the appropriate index. In general, you can measure

Large-cap stock funds against the S\&P 500 or Wilshire 5000
Small-cap stock funds against the Russell 2000
International funds against the MSCI-EAFE (Morgan Stanley Capital International Europe, Australasia, Far East Index)
$\checkmark$ Bond funds against the Lehman Brothers Aggregate Bond Index

The financial institutions listed also have a number of more specialized indexes for measuring performance of specialized funds such as large-cap growth, small-cap value, and so on.

## Mistake \#3: Failing to look at both shortand long-term performance

You should compare the fund's most recent returns, and also longer-term (three- to five-year) performance, with that of other funds from the same category. Looking at long-term results helps you tell whether the fund is relying on one good year for its overall good performance.

## Mistake \#4: Assuming that the fund with the highest average return will give you the most money

This is not necessarily the case, believe it or not. For proof, look at the year-by-year comparison of two different funds in Table 6-1.

Table 6-1 Net Annual Return Comparison (In Percent)

| Fund | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | 3-Year <br> Avg. | 5-Year <br> Avg. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 35.3 | 22.4 | $(-8.7)$ | 18.5 | $(-7.6)$ | 16.33 | 11.98 |
| B | 21.1 | 17.3 | $(-0.5)$ | 13.2 | 2.7 | 12.63 | 10.76 |

The natural assumption from looking at the numbers listed in Table 6-1 is that Fund A is better because its five-year average return is 11.98 percent, which is higher than Fund B's return of 10.76 percent. However, you arrive at a different conclusion when you look at Table 6-2, which shows the dollar amounts you'd accumulate in both funds if you invested $\$ 10,000$ in each at the beginning of each year.

Table 6-2 Amount Accumulated With \$10,000 Annual Investment (In Dollars)

| Fund | Year 1 <br> (end) | Year 2 <br> (end) | Year 3 <br> (end) | Year 4 <br> (end) | Year 5 <br> (end) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| A | $\$ 13,530$ | $\$ 28,801$ | $\$ 35,425$ | $\$ 53,829$ | $\$ 58,978$ |
| B | $\$ 12,110$ | $\$ 25,935$ | $\$ 35,755$ | $\$ 51,795$ | $\$ 63,463$ |

Looking only at percentage returns (Table 6-1), Fund A would have appeared in the winner's circle after the first three years, with a 16.33 percent average annual return, while Fund B's 12.63 percent average three-year return probably would have attracted little or no attention. But Fund B accumulated a slightly larger amount than Fund A after three years (Table 6-2). The difference is even more dramatic after five years.

After five years, Fund A achieved an 11.98 percent average return compared to 10.76 percent for Fund B, but the dollar amount accumulated in Fund $B$ is 7.6 percent more than Fund $A$ !

Here are the essential things to know from this example:
A fund that has less dramatic ups and downs can perform
better than a more volatile fund.
Average performance results are of limited value.
$\checkmark$ Don't consider "Top 10" listings the final word. Find the funds that can sustain top performance.
$\checkmark$ It can take a long time to get back to where you were after a bad year.

The last point of the list is especially important. Assume, for instance, that you have $\$ 100,000$ invested in a fund that drops 20 percent to a value of $\$ 80,000$. A 20 percent gain the next year brings your value up to $\$ 96,000$. But you're still 4 percent behind. If you're counting on a 12 percent annual return to get you to your retirement goal, you have a lot of ground to make up. Your $\$ 100,000$ at the beginning of this two-year period would have to be worth $\$ 125,440$ to be on track, but it's worth only $\$ 96,000$ after the recovery. You need a 46 percent gain the third year to get on track, which is highly unlikely.

The combination of setting unrealistic return expectations and picking funds that don't do well during down markets may eventually result in a serious gap between what you need to save and what you actually have in your account. Somewhere along the way, you need to make up for the investment gains that didn't occur. This is another reason why it makes sense to pick funds with less dramatic ups and downs.

In the final analysis, the funds you choose must meet your personal objectives. You're not always going to follow conventional wisdom - you need to make informed investment decisions that are right for you.

## Open the oven door once in a while to check your progress

After you develop your asset allocation pie, you should leave it alone, but don't ignore it completely. Check it at least once a year to see whether you need to rebalance, or bring your investments back in line.

To take a simple example, say you have 75 percent in stocks and 25 percent in bonds. Say stocks take off and do really well. The stock portion of your account increases in value at a much faster rate than the bond portion, to, say, 85 percent of your total account. The bond portion is now worth only 15 percent of your total account. You're in a position to lose a lot of money if the stock market drops - more than if you had 75 percent in stocks. You need to sell some stocks
and use the money to buy bonds to move your account back to a $75 / 25$ split, if that's the right asset allocation for you. You may not want to do this, because your stocks have been doing so well, but it's the right thing to do.

Studies have shown that many participants have never rebalanced their $401(\mathrm{k})$ accounts. Many workers over age 55 entered the market slump that began in 2000 with a higher percentage invested in stocks than ever in their careers. They lost a lot of money from their accounts because they hadn't rebalanced. In fact, at their stage in life, they should have actually gone one step further and reallocated, or changed, their fundamental asset allocation. They should've reduced their stock investments to a lower level than when they joined their plans. For example, a $50 / 50$ split of stocks and bonds would be more appropriate for a 60 -year-old than a $75 / 25$ split. If the participant had 85 percent in stocks, the unfortunate result would be greater losses than they should have had.

After you determine an appropriate asset allocation, you probably shouldn't change your allocation pie unless a major life change event occurs, such as inheriting a million dollars or winning the lottery, or you're approaching retirement age.

## Make sure that your pie complements the rest of the meal

One of the cardinal rules of planning a menu is that, if you serve a main dish with a crust (such as Beef Wellington or quiche), you shouldn't serve pie for dessert. Otherwise, you have too much crust for one meal. Likewise, make sure that your 401(k) investments go well with other investments you have. They should balance as a whole.


For example, say your company matches your 401(k) contribution in company stock, and you've built up quite a lot of it -50 percent of your 401(k) balance. Assume that you can't change this distribution, because your employer requires you to hold the stock until you turn 55, and you're only 40 . You also buy additional shares through a stock purchase plan. What can you do? You should count the company stock as a high-risk stock investment when you decide how to invest your own contributions to your 401(k), and try to use your own contributions to adjust your overall risk to a more comfortable level.

You should also take into account how you're investing in your IRA or outside savings account. If you're married, you can look at your 401(k) and your spouse's as one investment and compensate for the aggressive company stock investment in yours with more conservative investments in your spouse's account.

You should also take into account any guaranteed retirement benefit payment that you expect from your employer with either a definedbenefit or cash balance pension. With these plans, your employer takes the investment risk rather than you. With a defined-benefit plan, you receive a regular defined payment when you retire. Having either of these plans gives you room to invest your 401(k) money somewhat more aggressively, but only if you've been, or expect to be, with your employer for enough years to qualify for a significant pension payment. (That may be quite a few years.)

Of course, things can change very quickly. Your company may change or terminate the plan, the company may be sold or go out of business, and so on. Your investments should be re-evaluated if changes such as these occur.

## Seeking Help from the Pros (and We Don't Mean Julia Child)



A common mistake 401(k) participants make is to randomly pick their investments without any idea of what they're investing in or why. Becoming informed about investing doesn't necessarily require a major time commitment.

## Finding books and publications

You can buy, or borrow from the library, a number of books that cover the basics of investing, starting with Investing For Dummies and Mutual Funds For Dummies, both by Eric Tyson (Wiley Publishing). Another good one is 401(k): Take Charge of Your Future, by Eric Schurenberg (Warner Books). Many public libraries also carry investing resources, such as mutual fund reports from Morningstar and Value Line, which are packed with information, including various funds' holdings, risk levels, and past returns. You may also want to talk to friends who seem to be successful investors, and ask them what resources they find helpful.

## 122 Part II: Finding an Investment Strategy That Lets You Sleep

## Consulting a real live person

Investing is like any other life experience - the result usually depends on the effort you're willing to put into it. If you're like us and most other 401(k) participants, you don't have a lot of time to manage your investments. (That's why you're reading this book and not a 500 -page tome on the theory of investing, right?) Consider getting professional investment advice. Your plan may offer advice, or you can also get advice independently from outside your plan.

An advisor can analyze the funds offered by your 401(k) plan and match up a specific investment recommendation with your risk tolerance and goals. The advisor will recommend exactly how much you should invest in each option and also whether you need to move around what's already in your account.

You should determine if the advisor makes money by advising you to invest in a particular fund or funds. Some are independent, or fee-based, while others earn a commission on what they sell. Possible sources for finding a good advisor include

- Word of mouth - but make sure that you ask people who seem to be doing well, not your colleague who's always asking to borrow a stick of chewing gum or five bucks.
$\checkmark$ Professional associations or companies, such as
- The National Association of Personal Financial Advisors (www.napfa.org), 1-800-366-2732
- The Financial Planners' Association (www.fpanet.org), 1-800-647-6340
- Dalbar, Inc. (www. dal barinc. com for company information, or http://moneycentral.msn.com/investor/ dalbar/main.asp for the Advisor Finder)


## Going online for info

Many resources for retirement investors are available online. For asset allocation and fund allocation advice, you can look at independent online advice providers. At publication, the top online advice providers were

[^1]```
\(\checkmark\) Morningstar (www.morningstar.com)
\(\checkmark\) Financial Engines (www.financialengines.com)
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Each online advice provider has a different presentation, fee, and technology, but they all gather information about you and make a specific recommendation for how to invest your money. You can either take the recommendation as is, or compare it with one you've come up with on your own.
mPower and Morningstar give you a general asset allocation recommendation for free. If you want specific advice on how much to invest in particular funds in your $401(\mathrm{k})$ plan, you pay a fee. In order to get the free asset allocation pie chart, both Web sites require registration. Financial Engines charges for providing a basic asset allocation pie chart, as well as for more detailed advice. (Information about these services was correct at the time of writing, but it can always change, of course.) The beauty of all three is that they provide independent advice - they don't stand to gain a commission by recommending one fund over another.
mPower provides easy-to-understand retirement investing information on its mPower Cafe Web site (www.mpowercafe.com). (Yes, that's a shameless plug for the Web site Brenda manages and Ted writes a column for, but heck, the site has been recognized for excellence.)

You can also find mutual fund reports by Morningstar and Value Line on their Web sites. Value Line charges a subscription fee, and Morningstar asks you to register with its site. (Morningstar also charges for certain services.) Both companies rate mutual funds, but keep in mind that the ratings are based on past performance, which is no guarantee of how the funds will perform in the future. Another resource for mutual fund information is Charles Schwab, the large online broker. Go to www. schwab. com and click on "Mutual Funds" to see how Schwab classifies various funds.

Whatever you do, remember that investing is not an exact science. The important thing is to do something, and make sure that what you do is reasoned. Even when you use an advisor, you should know enough about investing to determine whether the advice you're getting makes sense.


[^0]:    $\checkmark$ Money market funds
    $\checkmark$ Guaranteed investment contracts or stable value funds
    $\checkmark$ Bond funds (short- or intermediate-term)

[^1]:    $\checkmark$ mPower (www.mpower. com for company information, or http://money.msn.com/retire/planner.asp for the mPower retirement planner)

