

# Retiring

*Allowing employees to invest their retirement savings in the stock market may make good economic sense when the market is booming. But how well does it work when it's time to retire and the market's in the tank?*



By Kenneth A. Steiner and Karen E. Kost •

# in a Down Market

*During the last 25 years of the 20th century,* investors watched stock prices climb at an average annual rate of around 17 percent, as measured by the S&P 500. From 1995 through 1999, the S&P index rose a heady 22 percent a year, and retirement savings swelled along with it. Times were good, and many investors based their retirement plans on the assumption that they would stay good.

Since January 1, 2000, however, major market indices have dropped significantly and retirees and would-be retirees are rethinking their investment strategies and plans. Unless the stock market bounces back—soon—to returns like those of the late 1990s, many workers will be forced to either save more for retirement or work longer.

In fact, dwindling retirement savings may force some retirees to either return to work or lower their post-retirement standard of living. Employers that were desperately seeking experienced workers a few months ago may see their retention problems ease up—but may face other workforce challenges instead.

This article examines retirement income needs and the amount of annual savings necessary to accumulate sufficient assets to meet those needs. We then look at how our recent stock market performance is affecting workers' plans for retirement—and what that means for workers and employers.



TABLE 1

### Multiple of Pay Required at Retirement for Men

RETIREMENT AGE	POST-RETIREMENT INVESTMENT RETURN RATE			
	4%	6%	8%	10%
55	15.3	11.9	9.6	7.9
60	12.7	10.0	8.2	6.8
65	9.2	7.5	6.3	5.3
70	7.0	6.0	5.1	4.5

SOURCE: WATSON WYATT WORLDWIDE

#### How Much Money Does It Take to Replace a Paycheck?

The accumulated retirement wealth necessary to replace preretirement pay depends on many variables, such as gross preretirement pay, Social Security benefits, levels of preretirement savings, life expectancy, future tax rates, expected investment return in retirement, and more. Most experts set a target level of around 70 percent of gross preretirement pay for maintaining preretirement standards of living.

Tables 1 and 2 above show the approximate multiple of gross pay required at retirement to replace 70 percent of preretirement gross pay annually for life. Multiples are shown for various retirement ages and assumed annual rates of investment return. Since women generally live longer than men, separate multiples are shown for males and females. Assumptions include the following:

- The worker will not receive defined benefit payments (or has elected to receive the value of such payments in a lump sum).
- Social Security will replace about 20 percent of gross pay if benefits begin at age 62, and approximately 26 and 29 percent of gross pay if benefits begin at ages 65 and 70, respectively.
- The worker is aiming for a 75 percent probability of not outliving his accumulated retirement wealth.
- Payments after retirement will increase by 3 percent per year to keep pace with inflation.

The multiples shown in this table should be adjusted if:

- The worker wants a replacement target higher or lower than 70 percent, such as if she wants to pass on a significant estate to heirs.
- The worker is eligible for payouts from a defined benefit plan, in which case the multiple would be lower. For example, if a lifetime annuity replaces 20 percent of pay at age 60 but doesn't increase with inflation, the 10.0 multiple for an age-60 male with 6 percent assumed investment return would become 7.2.
- Gross pay is higher or lower than about \$75,000. Since Social Security replaces a higher percentage of income for lower-paid workers, workers who earn more must accumulate higher multiples, all else being equal.
- Future Social Security benefits are reduced, which is very likely.
- The annual inflation rate is expected to be more or less than 3 percent. For example, if inflation is expected to increase an-

TABLE 2

### Multiple of Pay Required at Retirement for Women

RETIREMENT AGE	POST-RETIREMENT INVESTMENT RETURN RATE			
	4%	6%	8%	10%
55	17.9	13.2	10.2	8.3
60	15.3	11.5	9.0	7.3
65	11.6	9.0	7.1	5.8
70	9.4	7.5	6.2	5.1

nually by 4 percent, the multiples in Table 1 would increase by approximately 10 percent to 15 percent, depending on other variables. A zero inflation rate would reduce the multiples by about 25 percent to 30 percent.

- Life expectancy is higher or lower than average, or the worker has more or less tolerance for the risk of outliving accumulated savings. For example, workers who wanted to be 90 percent certain they would not outlive their savings would increase the multiple by roughly 15 percent for men, 7 percent for women, depending on age at retirement.

Multiples in Tables 1 and 2 may also need to be adjusted if significant portions of accumulated assets will receive more or less favorable tax treatment than assets held in a 401(k) or individual retirement account.

For any given retirement age and investment return assumption, higher multiples are needed for women because they live longer on average. Workers who plan to retire at younger ages need higher multiples, as do those with lower expected rates of investment return.

As shown in Tables 1 and 2, there is an enormous range between the starting sum required for a 10 percent rate of return and a 4 percent rate of return. Toward the end of the 1990s, many workers believed early retirement was quite feasible, because their assets had significantly appreciated and they expected the same high returns in the future.

Tables 1 and 2 also show that conservative investors are unlikely to accumulate enough assets to retire, unless they save considerably more than the average saver over their working years (which also helps them establish a relatively low preretirement standard of living). Even those who invest aggressively over their careers, however, often invest much more conservatively after retirement. The "shorter horizon" of post-retirement investments generally precludes investing in high-risk, high-return investments, since retirees may not have adequate future income to replace potential losses.

#### How Much Should Workers Save for Retirement?

If a worker saves the same percentage of compensation each year, the percentage required depends on when the worker begins saving, annual pay increases, and the effective annual rate of investment return. In real life, a worker's pay may not in-

TABLE 3

### 30-Year Savings Rates Required to Achieve Target Accumulations—Men

RETIREMENT AGE	PRE-RETIREMENT INVESTMENT RETURN RATE 6%	8%	10%	12%
55	23.2	16.8	12.0	8.4
60	19.8	14.4	10.3	7.2
65	15.2	11.0	7.9	5.5
70	12.4	9.0	6.4	4.5

SOURCE: WATSON WYATT WORLDWIDE

crease by the same percentage each year, and investment returns vary significantly. Examining contribution rates required under these artificial assumptions, however, provides some sound general guidelines.

Table 3 shows how much a male worker needs to save per year (including employer and employee contributions to defined contribution plans) in order to accumulate the savings necessary for retirement (assuming a post-retirement earnings rate of 8 percent), which would be 9.6 times pay at age 55, 8.2 times pay at age 60, 6.3 times pay at age 65, and 5.1 times pay at age 70, as illustrated in Table 1. Assumptions include a savings period of 30 years and pay increases of 4 percent per year.

Savings rates for different target multiples can be estimated by multiplying the preretirement savings rates found in this table by the ratio of multiples desired. For example, if the 60-year-old male wishes to have a multiple of 10.0 instead of 8.2 because he anticipates lower post-retirement earnings, he would need to multiply the preretirement savings rates in this table by (10.0 / 8.2).

As you can see in Table 3, workers must save a relatively high percentage of their annual pay to meet the 70 percent replacement target objective, unless preretirement investments deliver consistently high returns. Since most people in the United States don't save that much (even with employer contributions added in), many workers will need to continue investing in the stock markets in order to meet their retirement income objectives. Historically, the stock market has been one of the only means of achieving high returns over the long term.

#### Dipping Stock Prices and Retirement Planning for Older Workers

The recent decline in stock market performance affects retirement planning for older workers and retirees in several respects: It may lower the value of assets, it may prompt workers to change investment strategies, and it may lower expectations for future investment performance. Sub-par stock market performance may even affect jobs, thus threatening workers' job security.

To assess the impact of declining stock values on retirement decisions, let's look at a male worker who had hoped to retire at age 60 with accumulated retirement assets equal to 8.2 times

his pay. Based on the assumptions underlying Table 1, he could meet his 70 percent retirement target by earning 8 percent per year in retirement.

As shown in Table 3, in order to accumulate retirement wealth equal to 8.2 times pay at age 60 (assuming an 8 percent annual rate of return after retirement), a 30-year-old male who receives 4 percent per year pay increases and expects to earn a 10 percent rate of return before retiring at age 60 must contribute 10.3 percent of his pay every year.

Let's assume that for the first 28 years, from age 30 to age 58, he contributes 10.3 percent of pay and earns 10 percent each year. At age 58, he would have accumulated assets equal to 7.1 times his pay. But, instead of earning 10 percent each year for the next two years, he earns -5 percent in his 59th year and -20 percent in his 60th year—which has certainly happened to some people over the past two years. Instead of accumulating 8.2 times pay by his 60th birthday, his accumulated assets are now only about 5.2 times his pay.

To meet his 70 percent target, he must work almost four more years, assuming everything else stays the same. At age 63.5, he will have about 6.8 times his pay, which should be enough to provide the 70 percent replacement target—as long as he can earn 8 percent per year after retirement. Thus, two years of poor investment returns mean that this worker must work an extra

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three and one-half years to reach his 70 percent target.

But what if this same 60-year-old decides that instead of being able to earn 8 percent per year in retirement, he can earn only 6 percent, because he's less willing to commit to the same level of stocks in his post-retirement portfolio? If he continues earning 10 percent per year on his investments before retirement, continues receiving 4 percent annual pay raises, and continues contributing 10.3 percent of pay toward retirement, he must work yet another 18 months, from age 63.5 until age 65. So, the two years of bad investment experience along with the resulting change in investment strategy could delay this worker's retirement by up to five years.

The effect on women would be even more pronounced. Since women live longer and thus need more savings, it will take them longer to catch up from their losses of the past two years, thus likely postponing retirement for six years.

Many older workers now wonder whether to continue investing a significant portion of their retirement savings in the stock market. Their current plans are based on the higher returns that stocks have traditionally offered. Switching to more conservative and safer investments will likely force them to delay their retirement.

The corporate trend away from defined benefit plans and toward defined contribution plans—in which workers bear the

entire investment risk—exacerbates this problem. Recent stock market performance demonstrates the need for careful retirement investment planning, especially for retirees and those close to retirement.

#### **Impact on Younger Workers and Those With Defined Benefit Plans**

For a somewhat younger male worker age 50, who started saving 10.3 percent of pay at age 30 and wants to retire at age 60, the drop in accumulated asset values from two poor years of stock market performance will delay retirement by around three years. Alternatively, the 50-year-old could increase his contribution from 10.3 to around 16 percent of pay over the next 10 years to be able to retire at age 60, all else being equal. Or, he could save the same amount, retire at the same age, but settle for replacement of about 54 percent of his final pay rather than 70 percent.

The impact on retirement planning for younger workers is diluted somewhat, and presumably these workers are better able to invest in equities over the long term to recover the losses of the past two years. On the other hand, if the stock market doesn't return to its former glory sometime relatively soon, younger workers, too, probably will need to save more to achieve the same retirement objectives.

Workers in defined benefit pension plans generally have been hurt less by the investment slump than other workers. However, since personal assets and 401(k) contributions have also been hit hard by stock market underperformance, even workers with defined benefit plans may need to delay retirement or save more.

#### **Implications for Employers**

More workers delaying their retirement may be a mixed blessing for employers. Employers need to attract and retain experienced employees, and the stock market slump and diminished retirement assets should result in a larger pool of willing and able workers, thus easing retention concerns.

But employers are looking for highly motivated employees and relatively low employment-related costs. Employees whose first choice would be to retire but are forced to continue working may not be highly motivated. Those stuck in lower rungs, waiting for others to retire so they can move into their jobs, may become less motivated, too. And, fringe benefits tend to be more expensive for older employees.

So employers—as well as employees—need to rethink their retirement strategies. Some may welcome their employees' decisions to delay retirement. Some may choose to offer special inducements to encourage retirement, while others may wish to explore phased retirement options. ●

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**KENNETH A. STEINER** IS THE RESOURCE ACTUARY WITH WATSON WYATT IN WASHINGTON, D.C. **KAREN E. KOST** IS A CONSULTING ACTUARY IN THE SEATTLE OFFICE OF WATSON WYATT.

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