

Saving for Retirement

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It's very hard for someone who isn't retired to know how much money will be needed for retirement. You can find many references of anywhere from 60% of your current wages to over 100%. The purpose of this article is to show you how much you might get in retirement as compared to your current wages. It will be up to you to guess whether that's enough.

The first component of your retirement income will be the social security payments for you (and your spouse). Every US worker gets an estimate each year from the Social Security Administration (SSA). A non-working spouse will get about 50% of the working spouse's value at about age 66 and significantly less at age 62. Contact the SSA for an estimate of your case. Divide that number by your current monthly wages and multiply by 100 to get a percentage of your current wages. For example, \$1,600 social security divided by \$4,000 monthly wage = 0.40. $0.40 \times 100 = 40\%$.

If you are really lucky and have a pension with a full cost of living adjustment (COLA), you can do the same thing as with social security above, except the non-working spouse won't get anything. If you will be eligible for a fixed pension, it's worth a lot less than a COLA pension. Also, fixed pensions are usually quoted in future dollar values. You can get a crude estimate of its real value in retirement by multiplying the employer's quote by your age as a percentage. For example, a 50 year old person would multiply by 50%. So, continuing with the example, the retirement value of a fixed pension would be $50\% \times \$2,000$ (employer's quote) divided by \$4,000 monthly wage = $0.25 = 25\%$ as a percent of your current wages. Using age as a percentage helps correct for the fact that a fixed pension is worth only a fraction of a COLA pension and makes a rough adjustment for inflation until the time the pension begins.

For many people, most of their retirement income will come from savings that have been invested and grown over the years. Projections of the future of investments are very speculative, but if you believe that the future will be somewhat like the past, we can get an estimate. In the simplified approach here, we're going to assume that you maintain an allocation of 50% stocks, 40% bonds, and 10% money markets and incur typical mutual fund and/or broker costs.

There are two components for investment growth: (1) growth of savings you have already accumulated, and (2) growth of new savings you add each year. To find the first contribution, divide the current balance of your retirement investments by your ANNUAL gross wages. Then look in the column of Figure 1 that is closest to your case. For example, suppose that calculation comes out to be 3. Then if you

have 6 years until you retire, you can expect your existing savings to contribute 15% of your current wages in retirement in today's dollar values.

Fig. 1. Retirement Income from Existing Investments
as a percent of current wages

Years till Retire	Investments divided by Annual Wages					
	0	1	3	5	7	10
1	0%	4%	13%	21%	30%	43%
3	0%	5%	14%	23%	32%	46%
6	0%	5%	15%	25%	35%	51%
9	0%	6%	17%	28%	39%	56%
12	0%	6%	18%	31%	43%	61%
15	0%	7%	20%	34%	47%	68%
20	0%	8%	24%	40%	56%	80%
25	0%	9%	28%	47%	66%	94%
30	0%	11%	33%	55%	77%	110%
35	0%	13%	39%	65%	91%	130%

Use Figure 2 to determine the contribution of your new savings to your retirement income. For example, if you are saving about 10% of your current gross wages for retirement, and you have 6 more years till you retire, then Figure 2 shows you might expect to get 3% of your current wages as retirement income. Often, people who are as close to retirement as this find they must save much larger amounts of their income. Sometimes this means that a non-working spouse must also add to savings by taking on a job, or otherwise retirement must wait till years later.

Fig. 2. Retirement Income from New Savings
as a percent of current wages

Years till Retire	Savings as a percent of current wages:					
	5%	10%	15%	20%	30%	40%
1	0%	0%	1%	1%	1%	2%
3	1%	1%	2%	3%	4%	5%
6	1%	3%	4%	6%	8%	11%
9	2%	4%	7%	9%	13%	18%
12	3%	6%	9%	13%	19%	25%
15	4%	8%	13%	17%	25%	34%
20	6%	13%	19%	25%	38%	50%
25	9%	18%	26%	35%	53%	70%
30	12%	24%	36%	47%	71%	95%
35	16%	31%	47%	62%	94%	125%

The final step is to add all of the components together. For example: 40% from social security, 25% from a pension, 15% from existing savings, and 3% from new annual savings. In this example, that totals 83%. That might well be satisfactory.

For a better estimate that is really tailored for the kind of expenses, debt, investment details, and retirement ages for your own situation, see *J. K. Lasser's Your Winning Retirement Plan* and/or use one of the programs from www.analyzenow.com.

Rationale

Most planning programs fail to explain the assumptions behind the numbers or otherwise ask the user to input values without any explanation of the alternatives. Most often, this is to hide optimism so that the plan from that source is “better” than some other.

We assume that pre-retirement wages, new savings, and retirement expenses increase at the same rate as inflation. We are looking for a level of retirement income (expenses plus taxes) that will last at least 25 years before investments are exhausted.

Since investment returns, especially inflation adjusted returns, are really impossible to predict, we must rely on historical indexes to represent securities. The source of annual returns is Global Financial Data. In this case, we have used the S&P 500 index for stocks, short-term treasuries for money markets, and long-term corporate bond indexes for the rest of investments. To account for fees and costs, we subtract typical values of 1.5% from stock index returns, 0.3% from short-term treasuries, and 0.5% from long-term corporate bonds. By historical standards, savvy investors using low cost index funds may do somewhat better while those who know little about investing may well fare worse.

Our model is based on 50% stocks, 40% long-term corporate bonds, and 10% money markets. This is a reasonable allocation for many who will be using this analysis. Those who are far from retirement and invest more aggressively may do better than our projections, but that’s a big “may” as many recent aggressive stock investors will confirm. On the other hand, those who invest mostly in CDs and bonds, and/or pay exorbitant advisory or fund loads may find our assumptions too optimistic. If you are uncomfortable with any of these assumptions, use any of the more detailed methods from www.analyzenow.com.

Although we use only one allocation, we use three different real (inflation adjusted) returns. The first of these is 3.3% growth of existing investments. The second is 4.1% growth of new savings that benefit from dollar-cost-averaging. Both of these are based on a 50% success rate using fifty 20-year-rolling-historical-periods with the first beginning in 1926. The last period ends in 1994 just before “irrational exuberance” sets in. The rationale for using 50% success rate is that, as a practical matter, there are things people can do who end up in the lower 50% category including retiring later if necessary.

Conversely, once someone has retired, there is no way to contribute new savings. Therefore, retirees must have more than a 50% chance that they will have enough money to last a lifetime. We’re going to use an 80% “success rate” meaning that your investments would last in about 80% of all 20 year rolling scenarios from the past since 1926 with inflation adjusted draws.

Retirees get much lower returns from investments because they sometimes must withdraw money when their securities are at low values. This produces “reverse” dollar-cost-averaging. Thus, when making regular withdrawals you get much lower returns than when you make regular deposits. The value for an 80% historical success rate with a portfolio as described above is only 0.3%. By using the Retirement Autopilot in *J. K. Lasser’s Your Winning Retirement Plan* or the programs from www.analyzenow.com, you may get a higher success rate.

Retirement “income” here is defined as the sum of retirement expenses and the income tax that would be due on that level of expense. If you have all deferred-tax investments like a 401(k) or IRA, this kind of income and the kind on an IRS return are the same. This is not true for investments outside of such plans. Your income tax on the IRS return would be different than the income implied here. This is almost an academic point during retirement because it turns out that there is very little difference between the final results if savings are all in a deferred-tax account or otherwise. “New savings” should also include any taxes you pay on retirement investments. If you pay all investment taxes from your wages before retiring, investments will grow at a before-tax rate of return. For more on this subject, see *J. K. Lasser’s Your Winning Retirement Plan*.

Caution!

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