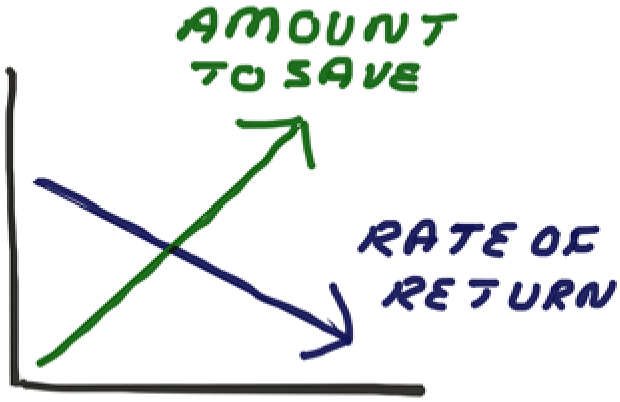
The Impact Returns Have on How Much You Should Save

Charles Rotblut, CFA
AAII Journal Editor

One of the fuzzier numbers in retirement planning is how much a person should save. Put another way, how much does an individual need to set aside each year to fund retirement expenses? It's a function of projected expenditures, sources of other income (e.g., Social Security, inheritance, etc.) and expected investment returns. Though they are all interrelated, the link between covering projected expenditures and investment returns is not one-to-one.



I'll start with the return side because this is where the math gets interesting, and disconcerting. An analysis from **AQR Capital Management** found that even small changes in projected investment returns make a big difference in the amount to be saved. Altering the expected real (inflation-adjusted) annualized rate of return from 5.5% to 3.5% for a portfolio split between 60% in stocks and 40% in bonds increases the required savings rate from 8% to 15%. Yes, you read that right: A two-percentage-point decrease in expected returns nearly doubles the amount you should save as a percentage of your salary.

This works in the other direction too. Increasing the projected return by two percentage points from 4.5% to 6.5% cuts the required savings rate from 11% to 6%. Since the devil is always in the details, I'll share a few of the assumptions used by AQR. The rates of return were adjusted to reflect inflation, which means they would be higher on an absolute basis—and most people default to viewing returns on an absolute basis. The savings rates included an employer match of 3% of a worker's salary. A target income replacement rate of 75% of salary was used, with 30% coming from Social Security and other sources. The investing time span was 40 years. Wages grew 2% annually on an inflation-adjusted basis over the 40-year period. For those of you closer to retirement, shorter time periods can be easily calculated to show the impact.

Read more »

More on AAII.com

- **Required Retirement Savings Rate Depends on Age and Income** – The Center for Retirement Research at Boston College says the amount of income needed, the age when savings are started and the planned retirement age all influence how much should be saved.
- **It's Not Easy to Accumulate $1 Million in an IRA** – An analysis by the U.S. Government Accountability Office (GAO) concluded that an investor would have to maximize contributions and stay fully allocated to the S&P 500 for 36 years to achieve an IRA balance of $1 million.
- **How AAII Builds and Presents Stock Screens** – AAII president John Bajkowski gives a behind-the-scenes look at our popular stock screens in his latest AAII Blog post.

Not an AAII member? **Join today**

Highlights from the *AAII Journal*

- **Investing to Avoid the Consequences of Being Wrong** – In the new September *AAII Journal*, Bill Bernstein discusses his philosophy of minimizing the consequences of investing in a way that proves to be wrong.
- **The Top ETFs Over Five Years: Health Care Loses Some Ground** – Health care ETFs continue to rank among the best performers, but homebuilding, consumer staples and bond funds also made the Top 10 list.

AAII Sentiment Survey

Optimism about the short-term direction of stocks prices exceeded 30% for the first time since June. **More about this week's results**.

AAII Asset Allocation Survey

Equity allocations rose to their highest level in 13 months, while cash allocations fell to their lowest level since April 2015. **More about the latest results**.

What's Trending on AAII

1. **From Saver to Spender: Managing Your Money in Retirement**

2. **Advocating the Paycheck Strategy for Lifetime Investing**
3. **Model Fund Portfolio: Introducing the Level3 Passive Portfolio**

The Week Ahead

The U.S. financial markets will be closed on Monday in observance of Labor Day.

September has historically been the worst month of the year for large-cap stocks. The S&P 500 index has only realized a September gain during 43% of all years since the start of 1946. The average September monthly loss has been 0.66%. To put these numbers into perspective, on an average calendar month, the large-cap index has gained 0.66% and risen 59% of the time.

Just two members of the S&P 500 are scheduled to report earnings: Hewlett Packard Enterprise Co. **(HPE)** on Wednesday and Kroger Co. **(KR)** on Friday.

The week's first financial report will be the Institute for Supply Management's (ISM) August non-manufacturing index, released on Tuesday. Wednesday will feature the Labor Department's July Job Opening and Labor Turnover Survey (JOLTS) and the Federal Reserve's periodic Beige Book.

Two Federal Reserve officials will make public appearances: San Francisco president John Williams on Tuesday and Boston president Eric Rosengren on Friday.

Read more »