## How Many Years Does It Take for Investment Returns to Matter More Than Savings?



Suppose you invest $\$ 10,000$ in the stock market in a given year and earn a $7 \%$ return on your investment. At the end of the year, you have your initial \$10,000 plus $\$ 700$ in investment returns for a total of \$10,700.

This means $93 \%(\$ 10,000 / \$ 10,700)$ of your net worth growth came from savings and only $7 \%$ ( $\$ 700 / \$ 10,700$ ) came from investment returns.

YEAR 1 NET WORTH INCREASE: \$10,700


Suppose the next year you invest another $\$ 10,000$ and again earn a $7 \%$ return. This year you would earn $\$ 1,449((\$ 10,700+\$ 10,000)$ * $7 \%)$ from investment returns. This means $87 \%(\$ 10,000 / \$ 11,449)$ of your net worth growth came from savings and $13 \%(\$ 1,449 / \$ 11,449)$ came from investment returns.

YEAR 2 NET WORTH INCREASE: \$11,449


If we keep doing these calculations each year, we'll find that investment returns account for more and more of yearly net worth increases as time goes on:

| Ann. Savings: \$10,000 |  |  |  | Ann. Returns: 7\% |
| :---: | :---: | :---: | :---: | :---: |
| www.PedlarFinancial.com |  |  |  |  |
| Year |  | et Worth | \% Net worth increase that came from savings | \% Net worth increase that came from investment returns |
| 1 | \$ | 10,700 | 93\% | 7\% |
| 2 | \$ | 22,149 | 87\% | 13\% |
| 3 | \$ | 34,399 | 82\% | 18\% |
| 4 | \$ | 47,507 | 76\% | 24\% |
| 5 | \$ | 61,533 | 71\% | 29\% |
| 6 | \$ | 76,540 | 67\% | 33\% |
| 7 | \$ | 92,598 | 62\% | 38\% |
| 8 | \$ | 109,780 | 58\% | 42\% |
| 9 | \$ | 128,164 | 54\% | 46\% |
| 10 | \$ | 147,836 | 51\% | 49\% |
| 11 | \$ | 168,885 | 48\% | 52\% |
| 12 | \$ | 191,406 | 44\% | 56\% |
| 13 | \$ | 215,505 | 41\% | 59\% |
| 14 | \$ | 241,290 | 39\% | 61\% |
| 15 | \$ | 268,881 | 36\% | 64\% |
| 16 | \$ | 298,402 | 34\% | 66\% |
| 17 | \$ | 329,990 | 32\% | 68\% |
| 18 | \$ | 363,790 | 30\% | 70\% |
| 19 | \$ | 399,955 | 28\% | 72\% |
| 20 | \$ | 438,652 | 26\% | 74\% |

In year 1, investment returns only account for 7\% of net worth growth.
In year 2 they account for $13 \%$ of net worth growth.
Then $18 \%$ in year $3 . .$.
Notice how it takes about 11 years for investment returns to account for more yearly net worth growth than savings:

| Ann. Savings: \$10,000 |  |  |  | nn. Returns: 7\% | Investment returns overtake savings |
| :---: | :---: | :---: | :---: | :---: | :---: |
| www.PedlarFinancial.com |  |  |  |  |  |
| Year |  | et Worth | \% Net worth increase that came from savings | \% Net worth increase that came from investment returns |  |
| 1 | \$ | 10,700 | 93\% | 7\% |  |
| 2 | \$ | 22,149 | 87\% | 13\% |  |
| 3 | \$ | 34,399 | 82\% | 18\% |  |
| 4 | \$ | 47,507 | 76\% | 24\% |  |
| 5 | \$ | 61,533 | 71\% | 29\% |  |
| 6 | \$ | 76,540 | 67\% | 33\% |  |
| 7 | \$ | 92,598 | 62\% | 38\% |  |
| 8 | \$ | 109,780 | 58\% | 42\% |  |
| 9 | \$ | 128,164 | 54\% | 46\% |  |
| 10 | \$ | 147,836 | 51\% | 49\% |  |
| 11 | \$ | 168,885 | 48\% | 52\% |  |
| 12 | \$ | 191,406 | 44\% | 56\% |  |
| 13 | \$ | 215,505 | 41\% | 59\% |  |
| 14 | \$ | 241,290 | 39\% | 61\% |  |
| 15 | \$ | 268,881 | 36\% | 64\% |  |
| 16 | \$ | 298,402 | 34\% | 66\% |  |
| 17 | \$ | 329,990 | 32\% | 68\% |  |
| 18 | \$ | 363,790 | 30\% | 70\% |  |
| 19 | \$ | 399,955 | 28\% | 72\% |  |
| 20 | \$ | 438,652 | 26\% | 74\% |  |

After that point, investment returns become the primary force that pulls net worth higher.

Here's another way to view these numbers:


It turns out that no matter how much you save each year, these numbers hold true. For example, suppose you saved $\$ 20,000$ consistently each year instead of $\$ 10,000$ :

| Ann. Savings: \$20,000 |  |  |  |
| :---: | :---: | :---: | :---: |
| www.PedlarFinancial.com |  |  |  |
|  |  | $\begin{array}{c}\text { \% Net worth } \\ \text { increase that } \\ \text { came from } \\ \text { savings }\end{array}$ | $\begin{array}{c}\text { \% Net worth } \\ \text { increase that came } \\ \text { from investment } \\ \text { returns }\end{array}$ |
| $\mathbf{1}$ | Net Worth |  |  |$\}$

Only the net worth numbers change. The percentages stay the same.
But what if you earn less than 7\% annual returns on your investments? Suppose you save $\$ 10 \mathrm{k}$ each year again but instead earn 5\% annual returns:

| Ann. Savings: \$10,000 |  |  |  | nn. Returns: 5\% | Investment returns overtake savings |
| :---: | :---: | :---: | :---: | :---: | :---: |
| www.PedlarFinancial.com |  |  |  |  |  |
| Year |  | et Worth | \% Net worth increase that came from savings | \% Net worth increase that came from investment returns |  |
| 1 | \$ | 10,500 | 95\% | 5\% |  |
| 2 | \$ | 21,525 | 91\% | 9\% |  |
| 3 | \$ | 33,101 | 86\% | 14\% |  |
| 4 | \$ | 45,256 | 82\% | 18\% |  |
| 5 | \$ | 58,019 | 78\% | 22\% |  |
| 6 | \$ | 71,420 | 75\% | 25\% |  |
| 7 | \$ | 85,491 | 71\% | 29\% |  |
| 8 | \$ | 100,266 | 68\% | 32\% |  |
| 9 | \$ | 115,779 | 64\% | 36\% |  |
| 10 | \$ | 132,068 | 61\% | 39\% |  |
| 11 | \$ | 149,171 | 58\% | 42\% |  |
| 12 | \$ | 167,130 | 56\% | 44\% |  |
| 13 | \$ | 185,986 | 53\% | 47\% |  |
| 14 | \$ | 205,786 | 51\% | 49\% |  |
| 15 | \$ | 226,575 | 48\% | 52\% |  |
| 16 | \$ | 248,404 | 46\% | 54\% |  |
| 17 | \$ | 271,324 | 44\% | 56\% |  |
| 18 | \$ | 295,390 | 42\% | 58\% |  |
| 19 | \$ | 320,660 | 40\% | 60\% |  |
| 20 |  | 347,193 | 38\% | 62\% |  |

We see a similar pattern: Investment returns slowly begin to account for more net worth growth over time, but in this scenario, it takes about 15 years for returns to become more important than savings.

This brings up an interesting question: How long does it take for investment returns to overtake savings for different annual return amounts?

This table reveals the answer:

| Annual Return | Years Until Investment <br> Returns Overtake Savings |
| :---: | :---: |
| $3 \%$ | 24 years |
| $4 \%$ | 18 years |
| $5 \%$ | 15 years |
| $6 \%$ | 12 years |
| $7 \%$ | 11 years |
| $8 \%$ | 10 years |

*This table assumes you consistently save the same amount each year.

The lower your annual investment returns, the longer it takes for returns to overtake savings. Even with a fairly high 8\% annual return, it takes a decade for investment returns to become more important than savings. This illustrates just how important savings are in the beginning of your net worth journey.

Keep in mind that for this analysis we assumed you invested the same amount each year. It's likely that as you get older, your yearly income will increase, and you'll be able to save more each year.

To see how increased savings impact these numbers, feel free to email me directly at apedlar@sterlingmutuals.com and I would be thrilled to send you the excel spreadsheet that allows you to modify the annual savings, annual savings increase, and annual investment returns.

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