

Stop Losing Money: Invest Wisely

By [Peter Livingstone](#) - December 3, 2016

You're probably losing money right now, without even knowing it! Why? Well, if you have money sitting in a bank account that's giving you a return of [less than 1.5%](#), you're losing money due to [inflation](#). Inflation simply means that your dollar will buy less a year from now than it can buy today. In fact, you would need ten dollars today to buy what you could for one dollar in 1950.

Fortunately, you can stop losing money through successful investing, and actually make money instead of having it be eaten up by inflation. You can invest successfully by using a simple plan and avoiding common mistakes.

Let me guess what many of you are thinking. You've probably watched one of those movies about rich and powerful Wall Street investors, the so-called "masters of the universe." Maybe you've thought "I can't compete with these guys", or "I don't want to risk losing my money, so I'll just keep all my savings or retirement funds in a bank account." Perhaps you listen to the news when the Dow Jones Industrial Average drops hundreds of points and think "I couldn't stand to lose money like those folks in the stock market."

Using some simple, evidence-based methods for wise investing, you can outperform the majority of stock market investors (even those "masters of the universe"). You don't need a lot of money to start investing. If you are fortunate enough to have a workplace retirement account, such as a [401\(k\)](#), you can start by contributing as little as a few dollars a month.

Even if you don't, you can get other types of [investment accounts](#), and then make small contributions regularly. Consider doing so right now to stop losing money! Well, after you read this article, that is.

Don't Get Get Ripped Off

(Hint: Avoid Actively Managed Mutual Funds)

First, let's review some long-term performance records of average investors, as well as the records of a broad United States [stock market index](#). According to [this study](#), the 30-year [compound annual growth rate](#) (essentially the average one-year return for the period) for average United States investors in equity (stock market) [mutual funds](#) was 3.66%. While not a terrible performance compared to today's bank savings account interest rates (about 0.06%), the annual return of the broad U.S. stock market for the same period, as represented by the [S&P 500 index](#), was 10.35%.

To put that in perspective, if the average investor contributed just \$100 per month over the 30-year period with an average return of 3.66%, that investor would have accumulated about \$65,000. But, if an investor had matched the return of the S&P 500 index, that investor would have about \$233,000. What a huge difference for someone nearing retirement! Wouldn't it be great to have that money in your pocket?

How can you guarantee that you can come very close to matching the performance of the broad stock market? The answer can be found by investing in a low cost [index fund](#), a type of mutual fund or [exchange traded fund](#) which are available through most investment firms and retirement accounts. The reason many individuals are not aware of the power of investing in index funds, and leaving their money alone to grow in these funds, is that there is very little incentive for the financial industry to make the case for such investments. After all, many stock brokers, fund managers, and financial advisors get paid through actively buying and selling individual stocks or funds by charging fees and commissions.

The goal of an index fund is simply to match the performance of a specific index of stocks, such as the S&P 500, by investing in all of the companies within that index. All funds charge some expense for the work of maintaining these investments, but **the best index funds charge only about 0.05% to 0.10% of your investment**, so your actual performance will be just that fraction below the index. Actively managed mutual funds, however, seek to outperform some specific index, so they charge much higher fees.

The big secret is that most all of these active funds [underperform the index funds](#). This is one case where you do not get what you pay for!

Don't Be Your Own Worst Enemy

A main reason why putting and keeping money in a low cost index fund generally outperforms more active investment styles is the **avoidance of fees and commissions**. Additionally, the [compounding effect](#) will increase your investment because these savings get reinvested in the fund, so the money saved each year will grow in the following years. The other big reason that most investors fail to match the return of the broad market is that they tend to try to “time” the market, thinking they can sell out before a big market drop and buy in when prices are low. In reality, however, many investors get panicked when the market drops, selling out at low prices, and then feel better after prices rebound, buying back in when prices are higher. Even the most successful investors of modern times, such as **Warren Buffett**, believe that they cannot predict the direction of the market in order to time it, and advise that [you shouldn't either](#).

This is just one example of behavioral mistakes caused by [cognitive biases](#) (common thinking errors) that undermine many investors. Such cognitive biases result from the mind's [two systems of thinking](#), the Autopilot System and the Intentional System. Learning about these systems and accounting for these biases will make you a much better investor!

Two broad cognitive biases which may contribute to buying and selling at the wrong times are the [overconfidence effect](#) and [loss aversion](#).

Overconfidence can lull us into a false sense of certainty that we know when the market will go up or down.

Loss aversion is our tendency to feel worse about losses than feel good about similar-sized gains.

Combined, these two biases can have the effect of leading us to sell when we see our investments drop, and then buy the same investments back when they go higher.

By simply admitting that the market will go up and down, but we cannot predict when, we can begin to overcome these biases.

Don't Forget That Life Is Uncertain, But History Is A Guide

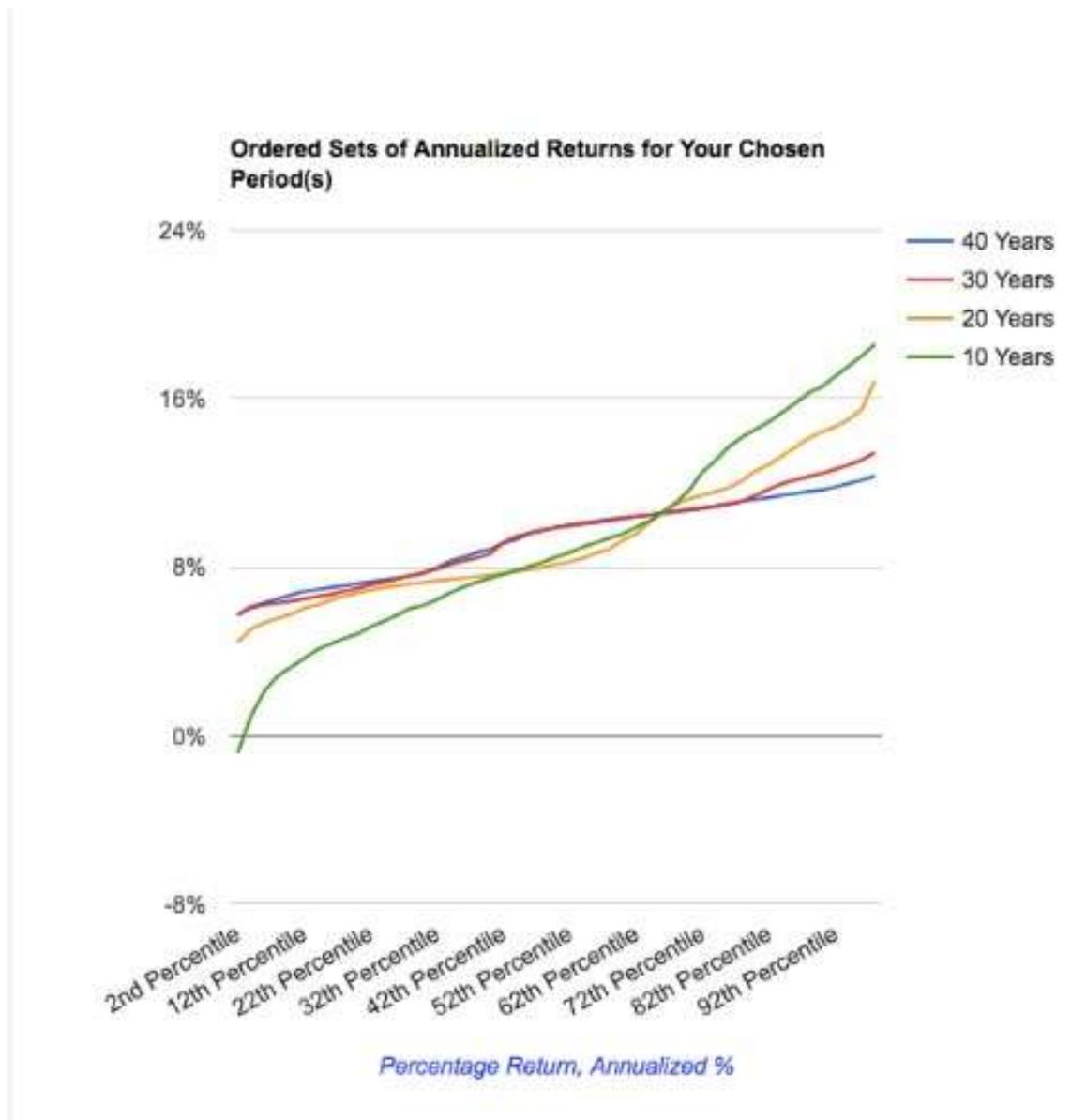
Before you start thinking that investing in an index fund is a guaranteed way of making your money grow, I must caution you that there are no guarantees in life, and anyone who tells you otherwise is a rotten liar. Yet by using [probabilistic thinking](#), and considering some history of the market, you can make some reasonable assumptions about your chances for success. Looking back through 145 years of history in the US stock market, there have been cases of individual companies and individual stock market mutual funds losing everything, but the performance of the overall U.S. market, as measured by the S&P 500, looks much different.

Assuming the market's characteristics over the past 145 years will give us a good representation of what the future will hold, here are statistics that may give some reasonable expectations. The data was compiled by Yale Professor Robert Shiller ([here is an interactive calculator based on his work](#)), for which the following results are derived).

<https://dqydj.com/sp-500-historical-return-calculator/>

The total average annual return for the S&P 500 (with [dividends](#) reinvested) from 1871 to 2016 was around 9.0% (not adjusted for inflation).

During this 145 year span, over every possible period of twenty years or more the index had a positive return (inflation notwithstanding), with the worst at 2% (1929-'49) and the best at 18% (1980-2000). Even for any given ten-year period during this time, the S&P 500 had a positive return 97% of the time. Over a one-year period, however, the probability of having a positive return dropped to 71%, with the worst 12 month period losing 62% (1931-'32) and the best gaining 140% (1932-'33).



Caption: S&P 500 returns for all sets of given time periods 1871 to 2016 ([Robert Shiller](#))

How can we put this history into perspective? Let's assume you had the worst possible market timing over this 145 year history. You got an inheritance from a rich uncle in September 1929, and invested it all in a fund which matched the S&P 500 for a period of twenty years. Even though you would have been extremely unlucky to choose these exact times to get in and out of the market, you still would have returned a 2% annual compounded return. This is certainly better than stuffing cash under a mattress.

Moreover, the vast majority of people do not simply put all of their wealth into the market at one point and exit at another. Most people receive money over time, and by necessity can only invest small amounts spread out over this time. By contributing incrementally to an investment over time, your chance of picking the very worst times to enter and exit are greatly reduced, and you have a much greater chance of matching the long-term market average.

There are fancy computer models called “Monte Carlo Simulations” which calculate the probabilities of investment returns for investing and withdrawing specific amounts of money over time based on historic behavior of markets like [this one](#). For simplicity though, let’s make some broad generalizations based on historical evidence. Assuming the characteristics of future stock market returns are close to what has been experienced in the past, over a period of **investing for ten years or more (the longer the better)** in a low cost index fund tracking the S&P 500, you would almost certainly have gains, most likely in **the range of 5% to 13% annually**, averaged over the entire period. This return would, probably, beat the majority of active funds, and the vast majority of all other investors.

Don’t Just Buy The Top Performing Funds

What about those few funds and investment managers who have beaten the broad market index over many years, and why not invest with them? There has been a lot of [academic research](#) done trying to figure out how to do this, and the evidence suggests that there is no consistent, reliable way to predict who will beat the market average.

Many studies have been conducted to determine how to predict which investment funds will outperform. So far, the only factor found useful in predicting performance is costs – the lower a fund’s costs, the more of your money stays in the fund and grows. By the very nature of random luck, a few high cost, actively managed funds and investment managers will perform better than the market average for any given time period, but what are the odds you or I, or even a team of market researchers, could pick them?

Not very high, as the evidence shows.

Keep in mind that by investing in a low cost index fund you will not have much of a chance of making big gains quickly, and its value can drop substantially over a short period of time. However, if your goal is to save and invest over ten years or more and achieve the highest chance of positive returns, a low cost, stock market index fund is your best choice. This way, you can stop losing money, and make the best decisions to help you achieve your financial goals!

Questions to consider:

1. How much money do you have in savings that you are not very likely to need for at least ten years? Keep in mind that index funds are quite liquid, and you can get your money back in less than two weeks if you need it for some emergency.
2. How much can you save a little every month to invest for ten years or more?
3. Would you be comfortable knowing that the value of your investment might drop by 20%-60% sometime during that ten year period, even though there is a good chance that it will have an overall annual return of 5% or greater for the entire period? **Keep this in mind – with an annual return of 7.2% your money will double in ten years.**
4. Are you interested in more specific information on investing in low cost index funds and overcoming biases which lead to poor financial decision-making? If you are, I will have [more articles](#) on evidence-based financial decision-making and investing available through Intentional Insights.

Peter Livingstone

Peter Livingstone is an evidence-based investor, business process improvement expert, and mining industry consultant. He is a leader in several non-profits focused on helping people improve their lives through wise decision making and healthy lifestyles.

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Takeaways from the S&P 500 Historical Return Calculator

If you've seen [our previous calculator on this subject](#), you've probably already drawn some conclusions about why this data is so interesting when presented this way. Let's stress one main point for you again: **the numbers look better and better the longer the time period you select.**

That is, as your holding period increases:

- Volatility smooths out
- Returns become more predictable
- For long enough time periods negative returns actually disappear

Of course, at this point we need to caution you: **past performance is no guarantee of future results.** However, past performance *is* an excellent way to determine if the plans you've made based on future investment returns are *reasonable*.

If you expect to return 12% real over a 40 year career it helps to know... that's never happened before. **A 10.28% annualized real return is the winner, so far.**

Knowing what has happened in the past, though, is a reasonable guide for what might happen in the future.

You'll also note that the minimum 40 year real return was 3.188% at the time of this writing. At no point over a 40 year career did the S&P 500 lose to inflation (thus far).

S&P 500 Historical Return Calculator

Personal Finance May 7, 2018 by [PK](#)

On this page is a *S&P 500 Historical Return calculator*. It allows you to input time-frames from 1 month all the way up to 60 years and 11 months and crunches data for historical returns on the S&P 500. It runs over all rolling periods contained in [Robert Shiller's](#) S&P data set, which starts in 1871. Once returns are calculated, you can navigate to the 'Chart' tab, and we will graph them as ordered sets.

You can adjust for dividend reinvestment (note: no fees or taxes) and inflation (measured by CPI). The results *also* show [a measure](#) of volatility – the *monthly realized historical volatility* and *annual realized historical volatility*, which will automatically recompute for any new monthly data we add (you should follow our [S&P 500 Dividend Reinvestment Calculator](#) for updates). Finally, if you select an ending month in the 'Input' tab, DQYDJ will calculate **every** period ending on that month – useful for historical period comparisons.

www.sautterinvest.ch

The S&P 500 Historical Return Calculator

Monthly Realized Historical Volatility: 14.052%

Annual Realized Historical Volatility: 18.581%

All returns are *annualized* to make them comparable - note the effect this has on apparent returns for shorter time periods. Volatility is *annualized*, without inflation, and without dividends.

Summary Statistics	40 Years	30 Years	20 Years	10 Years
Average Return	6.455 %	6.613 %	6.689 %	6.759 %
Median Return	6.375 %	6.628 %	6.813 %	6.692 %
Maximum Return	10.278 %	11.153 %	13.619 %	19.958 %
Minimum Return	3.188 %	1.895 %	-0.221 %	-5.927 %
Standard Deviation	1.364 %	1.670 %	2.962 %	5.128 %

Percentile (Pct. Beating)	40 Years	30 Years	20 Years	10 Years
90 %	4.895 %	4.445 %	2.602 %	-0.670 %
80 %	5.296 %	5.005 %	3.686 %	2.465 %
70 %	5.541 %	5.562 %	5.281 %	4.388 %
60 %	5.928 %	6.114 %	6.009 %	5.564 %
50 %	6.375 %	6.628 %	6.813 %	6.692 %
40 %	6.783 %	7.136 %	7.566 %	8.178 %
30 %	7.152 %	7.680 %	8.336 %	9.717 %
20 %	7.483 %	8.197 %	9.110 %	11.028 %
10 %	8.214 %	8.709 %	10.877 %	13.845 %

Source: <https://dqydj.com/sp-500-historical-return-calculator/>