# The Layman's Guide to Passive Investing 

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#### Abstract

Passive investing is a long-term method of investing that utilizes the time value of money and compounding interest. Passive investing allows the investor to compete with professional investors without active trading. Once the index fund is activated, the investor can walk away without having to manage it on a day-to-day basis. The risk of an index fund is practically eliminated by spreading the investment across a basket of instruments that allows the investor to minimize diversifiable risk. According to Kathryn Vasel of CNN Money (Vasel, 2020: CNN.com), only 39\% of Americans could raise $\$ 1000$ in an emergency. Think about that! Only 4 in 10 working Americans could come up with $\$ 1000$ in an emergency. Could you raise $\$ 1000$ right now if you needed to? The secret to passive investing is "Little and often fills the purse!" Left to one's own management, a savings account will soon go dry. The secret to building wealth over time requires innovative tactics such as removing the responsibility of managing your money and automating it for free. In 1981, Herbert Whitehouse introduced the concept of the 401 k plan as a way to subsidize pension plans. He later lamented introducing such an investment because instead of subsidizing a pension plan it replaced it. Today, pension plans are being eliminated as businesses face global competition and are forced to cut costs. Another problem with 401 k plans is that many workers fail to transfer them to their new employment. For example, in 2019, the U.S. saw the greatest jobs turnover rate ever according to CNBC (Hess, 2020). Sixty-three million Americans quit their jobs because they found better jobs. Unfortunately, the majority of them decided to cash in their 401k's instead of rolling them over to their new job. If you are fortunate enough to have a pension plan and a 401 k , you should consider augmenting your retirement cash flows by starting a passive fund that is free to manage. By the time you retire, you should have enough cash to sustain your present standard of living.


## Keywords

Passive Investing, Free, No Cost

## 1. What Is a Passive Fund?

It is important to understand the difference between an active fund and a passive fund in order to appreciate the value of a passive fund. An active fund is one that is managed by a broker or a licensed fund manager such as a mutual fund. According to 20 Something Finance (Miller, 2009), these managers are making subjective decisions on different investment instruments and strategies on your dime.

Active managers invest in a portfolio of stocks and bonds based on price-toearnings ratios, valuations, and risk profiles. Of course, they charge a hefty premium for these services and many times, will churn (trade in and out of positions to generate commissions) your portfolio without noticeable results.

A passive fund does not require a broker or manager because it is manage-ment-free. It manages itself; thus, the name passive fund. It does this by automatically spreading your money equally across all companies within the index. It can be structured in different forms such as an exchange-traded fund (ETF), index fund or real estate funds or the standard \& poor 500 indexes (SPY).

Since 2017, money has poured out of active management funds and into passive investing funds because of low volatility in the markets, high correlations between price and earnings, and because it is free to manage. Lisa Shalett, (Shalett, 2017), head of investment and portfolio strategies at Morgan Stanley states that between 2010 and 2016, only $33 \%$ of U.S. large growth stock pickers beat the Russell 1000 Growth Index. With a record like that, it stands to reason that a passive investing fund merits consideration.

Index investing is a passive investment instrument that uses the time value of money and interest compounding over a long-time horizon. The Standard and Poor 500 index fund is one such passive index fund. It is a buy-and-hold strategy that accumulates wealth over time. It is important to understand the difference between simple interest and compound interest to appreciate the time value of money. For simple interest, the formula is: simple interest $=$ principle $\times$ interest rate $\times$ time period. For example, if you invested $\$ 5000$ dollars in a certificate of deposit (CD) with $10 \%$ interest per year for five years, how much will you have earned at the end of five years? Using the simple interest formula:

$$
\begin{aligned}
\$ 5,000+\$ 5,000 & =\$ 10,000 \\
\$ 5000+\$ 2500 & =\$ 7500
\end{aligned}
$$

So your original investment of $\$ 5000$ would earn $\$ 2500$ over five years at $10 \%$ interest; not bad! Now, let's calculate the same investment using compound interest. The formula for compound interest is: Compound Interest $=$ Principal $\times$ $(1+\text { Rate })^{\text {Time }}$. Looks complicated but it is quite simple. What compound interest enables you to do is earn interest on both the principle and the interest each year. Using this formula, the numbers look like this:

$$
\$ 5000(1+0.10)^{5}=\$ 5000(1.10)^{5}=\$ 8052.55
$$

Using compound interest enable you to make $\$ 552.55$ dollars more that using simple interest because you earned interest on your principle and on your inter-
est each year. Figure 1 compares simple interest and compound interest.
The Standard \& Poor 500 index is the benchmark to which all other investments are compared and is an excellent passive investment. You have heard the saying "Don't put all your eggs in one basket". This holds true for passive investing. Your money should be spread over a broad array of stocks with different levels of risk in order to minimize diversifiable risk. Beta is the measure of risk; the higher the beta, the higher the risk and the higher the required rate of return (RRR). A neutral beta is 1 and this corresponds to the S\&P 500 index. When you invest in the S\&P 500 index fund, you spread your money evenly, overall 500 companies that make up the S\&P 500 index. Tesla is the latest inductee of the S\&P 500 and was added in December of 2020. Apple makes up the largest percentage of the S\&P 500 at about 6 percent. The S\&P 500 index is reflective of the overall market volatility. According to historical records, the S\&P 500 index has had an average return of about $10 \%$ since 1957. In fact, according to Ian Webster (Webster, 2021), "If you invested \$100 in the S\&P 500 at the beginning of 1957, you would have about $\$ 54,323.03$ at the beginning of 2021, assuming you reinvested all dividends. This is a return on investment of $54,223.03 \%$, or $10.34 \%$ per year." This risk/return ratio is difficult to beat. By investing in the S\&P 500 index fund, you are only exposed to the market risk which all investments are exposed to and which is composed of different types of risks such as equity risk, interest rate risk and currency risk. A rising tide lifts all boats as they say and market risk is that tide. All businesses and investments are exposed to market risk.

The essence of passive investing is to eliminate the burdensome brokerage fees and high risk that goes with stock trading. This is the best instrument to grow wealth over time. Using compound interest and continuous infusion of money, your index fund will grow substantially over time; moreover, you will have peace of mind that your portfolio will grow steadily and securely without the volatile fluctuations of the stock market. Once you have set up your passive investing fund, it will become an automated process from that point onward and manage itself for free. You will not have to try to out-think the markets but can rest assured that your index fund will imitate the markets step for step. Hedge fund managers spend their days trying to outsmart the markets in an attempt to outperform them. Very few succeed in spite of very elaborate tools such as the Black Scholes formula and other sophisticated metrics. Experts advise that if you are managing your own investment portfolio, you should never try to handle more than three or four stocks at a time. History is replete with failures due to brokers who tried to manage many stocks simultaneously. This brought about the introduction of index funds during the crisis of the 1970s and then exchange-traded index funds (ETF's) by 1990. Today, ETF's track the performance of major indices such as the S\&P 500 (SPY). You can now trade these index funds just like stocks.

There are several advantages to passive investing:
First, you are able to accumulate wealth over time at a low diversifiable risk level.


Figure 1. Simple versus compound interest.
Source: http://www.theinvestmentmania.com/compound-interest-real-8th-wonder/.

Given that such an investment uses compound interest and manages itself for free, it allows the investor to set up the account and forget about it. Out of sight, out of mind. When you take the day-to-day management of your portfolio out of your control and automate it, you can relax and be certain that your portfolio is functioning optimally. When the market goes up, the value of your portfolio goes up. When the market goes down, you are able to purchase more stocks at a lower price. In the long run, the value of your holdings will increase because of the time value of money and the accumulation of stocks.

Second, a passive investing account is easy to set up. You need a brokerage account that will enable you to start an S\&P 500 index fund; the stock symbol is (SPY). If you have a 401 k , you already have a broker. You just need to contact your broker and ask them to help you set up the passive fund. If you do not have a brokerage account, you can set one up at one of several free brokerages such as Reddit or Robinhood (see links below).

Third, by investing in a passive investing index fund, you can circumvent any competition with hedge funds and still be competitive with them. By using the law of compound interest, you can stay on par with the pros in the long run.

Fourth, by investing for the long term, you forego the capital gains tax each year.

Following is a list of potential ultra-low fee, passive investment instruments.

1) Real estate: with all-time low-interest rates in 2021, this is a great way to invest for the long run. With a down payment of about $20 \%$, you can secure reliable tenants for continuous cash inflows. Using the net present value formula, you can easily determine your profits over the long run. Real estate investment trusts (REITs) are another great alternative for those who don't care to actively manage real estate properties. You can secure about $90 \%$ of your taxable income through dividends. Still another alternative is known as crowdfunding whereby you can invest in commercial or residential properties with the tax advantages
like that of direct ownership.
2) Dividend stocks: owning stocks that offer dividends is known as fixed income. Dividends are dispersed on a periodic basis, usually semi-annually and are one of the simplest ways to earn passive income. Dividends are dispersed from retained earnings by companies and owners of the stock can choose between accepting the cash or reinvesting those earnings. By reinvesting earnings, you use the time value of money principle to grow your earnings over time. It is important that you choose which companies to invest in that pay dividends. Only invest in companies that have a proven track record of paying dividends; a good rule of thumb is to stick to companies that have been paying dividends for at least 25 years.
3) Crowdfunding: also known as peer-to-peer lending is another popular method of passive investing. It involves lending money to other persons or companies. The interest rate for this type of lending can range from $7 \%$ to $12 \%$. Like any other passive investment, you must perform your due diligence in whom you are going to lend money.
4) Municipal bonds: also known as munis, municipal bonds are a way for cities and states to finance their projects. One advantage to many municipal bonds is that they are tax-exempt. There are many forms of munis all over the country and you can choose among many types. One caveat is to stay clear of revenue bonds because they pay interest based on revenues generated by the projects that are financed. Historically, these have not lived up to the expectations. Another precaution is to invest only in bonds that are within what is called investment grade bonds; that is, bonds that are rated between AAA to BBB.

Remember that active investment strategies can be very expensive. Many portfolio managers will churn your account without appreciable gains just to generate their own commissions. Fees are higher because of all the buying and selling of positions with your money. This constant churning diminishes your returns as you pay the hefty salaries of fund managers. Many managers are not constrained by your level of risk aversion. They routinely buy and sell growth stocks that are high risk in an effort to make up for losses incurred by previous bad calls. Very few active managers manage to surpass the gains of passive benchmarks like the S\&P 500 index fund. In fact, transaction fees can total $3 \%$ to $4 \%$ of your portfolio value which could eat into your returns by as much as $4 \%$ per year according to financial experts. The popularity of passive investing index funds has been growing for years as can be seen in Figure 2 below.

## 2. How to Get Started

When you start a new job, you are required to fill out a W-4 form which determines your required deductions and optional deductions. Your optional deductions include insurance premiums, a 401 k plan, stock option plans and so on. You determine how much you want to apportion toward a passive fund such as the S\&P 500 index fund. Usually, a good starting point is $3 \%$ of your gross income.


Figure 2. S\&P vs equity funds.
Source: https://infogram.com/sandp-500-vs-equity-funds-2015-1gv4m7dvgr3ym18

Once you get the groundwork done, it is an automatic process from then on. You don't need to manage your fund and you don't need anyone else to manage it because it manages itself for free. This is why they call it a "passive investing fund"; it manages itself!

After you have filled out your W-4 form, you need to set up a brokerage account. If you have a 401k plan, you already have a brokerage account. You only need to contact your brokerage firm and they can help you set up your S\&P 500, passive investing index fund. As mentioned earlier, the stock symbol for the S\&P 500 is SPY. Once the fund is set up, you no longer need them to manage it; it will manage itself. Your employer will automatically apportion your selected percentage from your gross income to your passive investing fund.

A passive investing fund follows a well-proportioned bell curve. In the beginning, your fund will parallel the asymptote of the x -axis which is typical of a bell curve. It parallels the x -axis for the short term and it may seem like you're going nowhere. But in time, and because of compound interest, your fund will begin the vertical ascension of the earnings bell curve. You will enter into what is known as the growth stage of earnings.

You can download a W-4 tax return form from the IRS web site (https://www.irs.gov/). Once there, click on the "forms and Instructions" tab and then on "form W-4". The W-4 has been redesigned since 2020 due to the tax cuts and jobs act (TCJA). It is a more streamlined form that can now be completed in only 5 steps.
(https://www.businessinsider.com/personal-finance/how-do-i-fill-out-new-w-4-tax-withholding-form). Your employer can provide a W-4 form to you or you can access one on-line. The W-4 form follows the traditional steps as before.

When you arrive at step 4, this is where you will state your optional deductions. It is here that you will specify what percentage of your gross income should be appropriated to your passive investing fund. You can direct, for example, that $3 \%$ of your gross income be directed to your passive fund. Once you have completed your W-4 form, you submit it to your employer and from that point on, it becomes an automated process; thus, the term passive investment.

Below is a list of brokerage firms where you can set up your passive investing fund:

Interactive brokers: https://www.interactivebrokers.com;
SoFi brokers: https://www.sofi.com;
TD Ameritrade: https://www.tdameritrade.com;
Wealthfront brokerage: https://www.wealthfront.com;
Ameritrade brokerage: https://www.tdameritrade.com/home.html;
Interactive Brokers: https://interactivebrokers.com.
There are a few, free brokerage firms that have become popular of late including:

Reddit: https://www.reddit.com;
Robinhood: https://www.robinhood.com.
Passive investing is a great strategy that can earn a great deal of money over the long term with very limited risk. This is a great strategy that will complement your 401 k and your social security during your retirement years. It will allow you to retain your present standard of living.

Happy investing!

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## Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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