

Passive investing:

A DEBRIFING AND GUIDE



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Capilano University

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# Introduction

Today we have easy and prompt access to a lot of resources and information about investments. One of the most debated matters when talking about it is the role of active investing in personal finance for accumulating patrimony. There is a lot of steps when investing actively. You need to structure a plan, decide what will be your strategy, compute the valuation for the assets, manage the passives, and manage your asset allocation and risk, by studying how to weigh each asset to maximize your return given a certain risk that you are accepting to hold. Choosing individual assets is not easy, and even creating a portfolio allocation is not, so it has been common for people to give their money to other people to invest for them, they are institutional investors, which charge high fees for doing so. But studies have shown that even these highly qualified people are usually not able to perform better than the market, and even when they do it, they usually do not do it consistently. With that is being more common for people to invest in a passive whey, building more simple portfolios, with a not-so-complicated allocation, and buying ETFs or index funds that reflect what would be the consensus of the market. In this paper I will discuss deeply why do passive investing is, how, and the consequences of it.

# Three main issues about Returns

There are three main sources that affect your returns in the financial market (Swensen, 2011):

* Security Selection, instead of buying the index market, you choose individually your own securities, believing that your choices will perform better than the market. For example, imagine that the index is composed of A, B and C stocks, equally weighted, but you think that a better stock portfolio would be A and B, so you invest only in these, hoping that these two will perform better than the index, which contains the C company.
* Timing, changing the assets and percentages in our portfolio based on your bet about what is the short run and how will be the long run. For example, you think that developing countries stocks are going to outperform U.S. stocks in the next 6 months, so you decide to increase your portfolio weight in the first and decrease it in the second.
* Deciding what assets to hold in the portfolio, and percentages of each one in a more fixed way. For example, you could decide to hold 45% in U.S. stocks, 30% in treasury bonds, 15% high-yield bonds, and 10% in cryptocurrencies.

For security selection it is necessary to compute the right price of the asset, in order to buy if it values more than the market is pricing or selling if the market is valuing it more than it deserved. The standard way would be by forecasting the future cash flows of the asset, and choosing the right rate of discount, to calculate the present value of these cash flows. For marketing timing, usually they develop a macroeconomic strategy, thinking about how commodities, equities, interest rates, currencies, and inflation will behave in the future, and how the prices will reflect it. The allocation is about how the assets work together, the most common way to do it is by forecasting the return and covariance matrix of the assets and them making an optimized portfolio choice to maximize your Sharp Ratio that is the return above the interest rate given a certain risk.

# Why should you invest passively?

The problem is that this is a complicated process and wrong decisions lead to losing money. For this reason, it has been common for individual investors to trust institutions and professionals to manage their money for them. The problem is that has big costs, usually, they charge a percentual amount annually from the money that they manage, plus a percentage of the returns above some benchmark. Another issue is that choosing a company to invest actively your money in is almost as difficult as would be for you to choose your individual assets. But the biggest problem is that studies have shown that most of the active investors do not perform better than the market indexes. This makes sense, because the price market of the assets is the actual consensus of all the institutional investors, and even they are being not always right, they are more time that than wrong. The efficient markets hypothesis[[1]](#footnote-2) created in 1950s and 1960s questioned the capability of active selections of securities to perform better than the market, concluding that the investors should hold the market portfolio itself (Bhattacharya & Galpin, 2011).

## Figure 1: Total assets in active and passive MFs and ETFs and passive share of total

Chart, line chart, histogram

Description automatically generated

Anadu, Kruttli, McCabe, & Osambela, Figure 1: Total assets in active and passive MFs and ETFs and passive share of total, 2020

According to Brown (2020), outperforming a benchmark that represents one index is difficult, specially after taking account of all costs for doing so. Due to that and the creation of other investment resources as ETFs[[2]](#footnote-3), is becoming more common to invest passively. Instead of choosing specific assets, you can expose yourself to indexes, they are formed by a lot of individual assets, and they try to reflect the average performance of a whole class charging much lower fees. The iShares Core S&P 500 ETF from BlackRock for example charges 0.03% annually and reflects a portfolio of large and established U.S. companies.

# How to invest passively?

There are many ways to do passive investing[[3]](#endnote-1), the simplest is choosing the classes of assets in which you are going to be exposed, deciding the weights for each one, and the periodicity of rebalancing the weights. The common classes are stocks, both national and international indexes, commodities, bonds, and other currencies. The weights for each one depends heavily on the tolerance for risk, the time horizon of the investment, and other things. The more time you rebalance, the more costs you will have, so you should focus on rebalancing 1 to 2 times a year, and the more effective it is to change your new contribution to the class that is underweighted.

# Creating a Portfolio

I compiled some financial data from Yahoo Finance Free Database, and made some simulations with the historical data using Python 3.

|  |  |  |
| --- | --- | --- |
| Asset Class | Security | Weight |
| U.S. Stocks | IVV | 50% |
| U.S. Bonds | AGG | 30% |
| Treasury Bonds | TIP | 20% |

In this case we invest all our money in the same day with the designed weights, and we did not changed the weights, or invested more money after. This was a simple example with historical data. But is important to know that a lot can be done with passive investing, specially individual customization in order to achieve specific goals for each person or family.

## Figure 2: Passive Investing Portfolio Example

Chart

Description automatically generated[[4]](#footnote-4)

# Conclusion

Creating an investment plan is really complicated, and it takes a lot of time and resources; moreover, it can lead to harmful results if done in a not appropriate way. We also know that even professionals are not successful in performing better than the market in general. Therefore, we came to a solution that is investing passively, choosing indexes [[5]](#endnote-2)to represent assets classes and fixed weights for the portfolio. This has a lot of benefits, it saves time, it has much fewer costs than investing actively, even if it is by funds or by choosing the assets by yourself. And pursuing indexes, you are exposed to many different individual assets, which makes you less prone to idiosyncratic risk, making your portfolio less risky than more concentrated ones. Another curiosity is that when you do passive investing, you are investing in the price that reflects the mean perception of all the institutional investors over an asset class. The most important thing for individual investors is about how much they can save, and for how long. Due to compounding returns, starting as early as possible is the most important thing, because, after some time, the capital starts to grow fast.

# Bibliography

Anadu, K., Kruttli, M., McCabe, P., & Osambela, E. (2020). Figure 1: Total assets in active and passive MFs and ETFs and passive share of total. *The Shift from Active to Passive Investing: Risks to Financial Stability?* Federal Reserve of Boston.

Anadu, K., Kruttli, M., McCabe, P., Osambela, E., & Chae Hee Shin. (2018). The shift from active to passive investing: Potential risks to financial stability? *U.S. Federal Reserve Board's Finance & Economic Discussion Series*, 1-28.

Bhattacharya, U., & Galpin, N. (2011). The global rise of the value-weighted portfolio. *Journal of Financial and Quantitative Analysis 46 (3)*, 737-756.

Brown, S. J. (2020). The efficient market hypothesis, the financial analysts journal, and the professional status of investment management. *Financial Analysts Journal*, 5-14.

Crane, A., & Crotty, K. (2018). Passive versus active fund performance: Do index funds have skill? *Journal of Financial & Quantitative Analysis*, 33-64.

Nazaire, G., Pacurar, M., & Sy, O. (2021). Factor investing and risk management: Is smart-beta diversification smart? *In Finance Research Letters 41*, 1-13.

Puelz, D., Hahn, P., & Carvalho, C. (2020). Portfolio selection for individual passive investing. *Applied Stochastic Models in Business & Industry*, 124-142.

Swensen, D. (2011). 6. Guest Speaker David Swensen. Fonte: https://www.youtube.com/watch?v=wRdx7kVNQ\_E

Tokic, D. (2020). The passive investment bubble. *Journal of Corporate Accounting & Finance (Wiley)*, 7-11.

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# Appendix

The python code and the other data used for this project are available at:

<https://github.com/Gabrielmastrangelo/BCPT-123_Word_Power_Project>

1. There are three levels of market efficiency, and the most powerful one states that all available information is reflected in the price. [↑](#footnote-ref-2)
2. Exchange-traded fund is a type of security that tracks an index, sector, commodity, or other asset, but which can be purchased or sold on a stock exchange the same way a regular stock can. [↑](#footnote-ref-3)
3. Other way to invest passively is by choosing the risks factors to be exposed, they can be momentum, low beta, value, growth, etc. [↑](#endnote-ref-1)
4. The data was compiled from Yahoo Finance, and the plot was made in Python by the author. [↑](#footnote-ref-4)
5. John C. Bogle is credited as the creator of the first index fund. [↑](#endnote-ref-2)