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The Psychology of Passive, Active, and ESG Investing

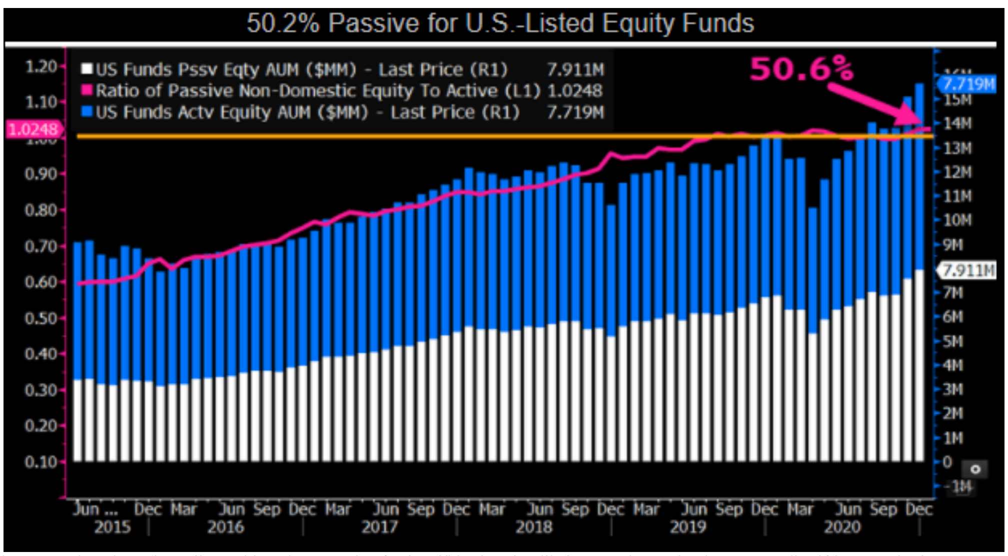
There are two main ways to invest in the stock market: investing directly and investing indirectly. The former is done by investing in individual public companies, bonds, or other assets and the latter is done by investing in funds or portfolios that are managed (either actively or passively) for the investor. Of course, one can pay an advisor to invest for them, but, in general, the money invested can be put directly in the market or indirectly in the market. In this paper I will discuss the increase in popularity of passively managed equity funds over actively managed equity funds. I will also discuss the up-and-coming ESG passive approach and how it compares to passive and active investing.

What is Passive Investing?:

Passive investing is an investment strategy characterized by low fees and a hands-off, long term approach; rather than frequently buying, selling, and picking different securities with the intent to beat the market or a benchmark, true passive investing attempts to mimic the returns of the market or a benchmark by following an underlying index (like perhaps the S&P 500, the NASDAQ, or the DJIA). Passive investing lies on the opposite side of the investment spectrum from active investing, as depicted below:

On the furthest side of the passive spectrum exists indexing, which implies investing money in an ETF (exchange traded fund) or mutual fund that matches/tracks a financial market index. As one moves further to the right, an investor begins to employ more active investment strategies – beginning with enhanced indexing which is the reweighting of an index fund to favor specific assets of the underlying index given a strategy, and ending with hedge funds. Hedge funds typically are only available to those who are able to put forth a significant principle investment in order to enter the fund (often times more than $1 million). They use a variety of trading and risk-management techniques with the goal of improved performance and often charge clients 2 and 20 – 2% fee for managing the principle investment and 20% of the profits generated. They use technical and fundamental analyses to enter both long and short positions of different securities and use leverage and derivatives to act on investment hypotheses. The main difference between the two investment approaches is cost – passive investment is very cheap and active investing is very expensive.

While passive investing first emerged in 1975 when John Bogle, CEO of Vanguard at the time, invented the first index fund copying the S&P 500 (later in 1993 the first ETF was created), it was looked down upon heavily by institutional investors and only in the past 20 years has it surged. According to BAML and Bloomberg, passive investing went from 22% of the overall U.S. equity fund market in 2000 to greater than 50% in 2021. Further, Morningstar reported that the majority of outflows from active U.S. equity funds between 2015 and 2020 went into passive funds. What was the hate on passive investment for and why have passive investment vehicles become so popular?



*Source: Bloomberg (https://www.bloomberg.com/professional/blog/passive-likely-overtakes-active-by-2026-earlier-if-bear-market/)

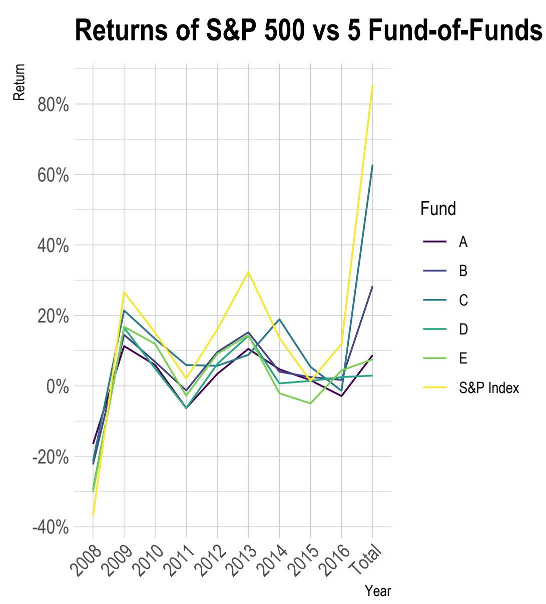
The psychology behind the shift from active to passive:

There are a few psychological reasons why it took such a long time for passive investing to gain momentum. First is the status quo bias: people like what they currently have and often times perceive a deviation from the norm as a loss. Before ETFs and passively managed mutual funds became abundant, investors only new active investments – the very concept of investing in an index didn't exist, and, as such, passive investing wasn't easily possible. Kahneman et al. (1991) showed that humans give preference to that which they currently possess, because of loss aversion as prescribed in prospect theory. In prospect theory, the value function in the loss domain is significantly steeper than in the gain domain, so when a person contemplates switching from what they currently have without much knowledge on the probability or value of the gain or loss (i.e. 50/50 chance of gaining or losing the same amount), the value of the potential loss outweighs the value of the potential gain, resulting in a negative expected outcome from switching and investors avoiding passive investments.

Another reason why it took a long time for passive investing to gain popularity is because of the perceived complexity of the stock market by the retail investor. Until recently, with the explosion of online investment tools like Robinhood that "democratize" access to the markets, it took a lot of knowledge to invest. The investment process catered primarily to the knowledgeable investor, and, as such, both the real and perceived complexity of the stock market "required" complex decisions, implying active investments over passive investment.

While there were significant psychological blocks slowing down passive investment, there is an aspect that aided the adoption of passive investing – that of regret. Regret occurs more so from action than from inaction (Inman & Zeelenberg, 2002). This being the case, the obvious dislike of regret could have propelled money managers and the average retail investor to favor a buy and hold strategy instead of an active strategy, for the regret of selling too soon is greater than the regret of inaction.

Of course, there are more fundamental reasons why passive investing is becoming so popular – they outperform most hedge funds in the long run, as demonstrated by the famous bet made by Warren Buffet that, over ten years, an S&P 500 ETF would perform better than any set of five hedge funds. Ted Seides, a co-manager at Protege Partners at the time, took on the bet and the proposed hedge funds he put forth got destroyed in the 10 years from 2008 to 2017 as show in the graph to the right:

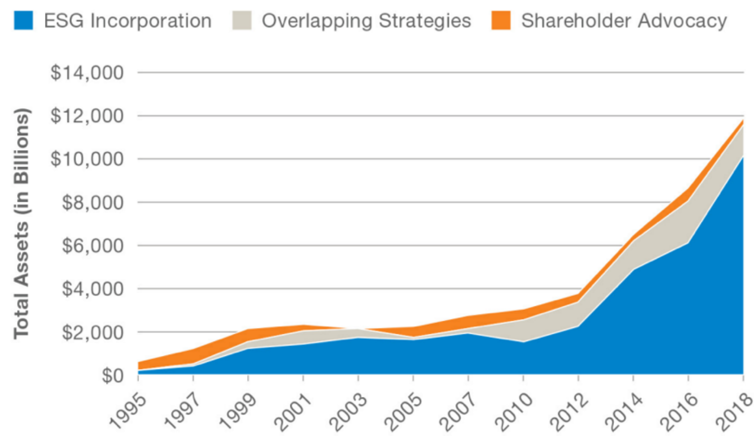


The Vanguard S&P 500 ETF had a 7.1% compounded annual increase over the period, whereas the five funds-of-funds had a 2.2% compounded annual increase.

ESG Investing:

ESG investing stands for investing while keeping in mind environmental, social and corporate governance. ESG investors would avoid investing in companies that are bad for the environment and society like oil and tobacco companies. Just as passive investing has exploded in the past several years so too has sustainable investing:

FIGURE 2: GROWTH OF SUSTAINABLE INVESTING 1995–2018



Source: US SIF Foundation

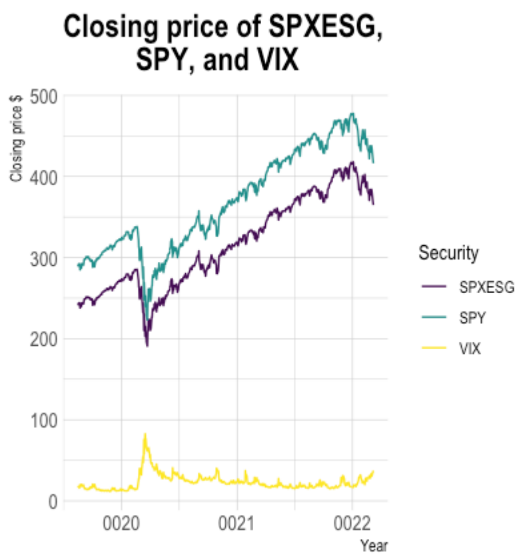
While it appears as though there has been an insane increase in sustainable investing the past few years (38% in the 2 years from 2016 to 2018 according to US SIF), this figure is slightly misleading as one explanation could be that there has simply been more identification of the sustainable investments. Nevertheless, the growth is clear and it appears as though consumer preferences have become more cognizant of the environment. Before there was a significant gap known as the action-intention gap in investing – while people had an intent to be aware of the environment, they never acted on it when it came to money. It seemed like personal preference and making money were at odds with one-another – as though one had to give up on the environment in order to make money or give up on money in order to support sustainable causes. This is clear in the 2018 surveyed proportion of actively managed ESG funds compared to passive:

	Number of Money Managers	Affected Assets (in Billions)	Percent of ESG Assets
Actively Managed	129	$3,684	92%
Passively Managed	27	$314	8%
Total Responding	**135**	**$3,998**	**100%**

Source: US SIF Foundation
Note: Some asset managers reported using both active and passive management across their ESG assets, so totals do not sum.

Money managers and investors in 2018 appeared to be worried about the state of ESG investments and perhaps felt more confident in an active strategy than a passive strategy. This might be due to the fear of the unknown in psychology. However, this is unfounded: The Morgan Stanley Institute for Sustainable Investing found “strong statistical evidence that sustainable funds are more stable” with “no trade-offs in returns” compared to traditional funds.

I, too, wondered how a passive investment like an S&P 500 ETF would compare to a passive S&P 500 ESG ETF. I couldn’t find any research on this so I decided to conduct my own research – I downloaded data from August 16, 2019 to March 8, 2022 for SPY (a S&P 500 ETF), for SPXESG (a S&P 500 ESG ETF), and for the VIX (the CBOE Volatility Index, a measure of fear and market uncertainty). I ran a few regressions and made a nice little graph:



As you can see from the graph, the results of the SPXESG and the SPY are pretty similar, after all, they both are indexes of the S&P 500, except one is environmentally conscious. Moreover, you can see from the VIX that when the pandemic hit in March of 2020, there was a massive spike in fear and uncertainty, which also correlates with the huge drop in the S&P 500. If the researchers at Morgan Stanley were correct that sustainable funds are more stable, then we should see a lower correlation between the VIX and the SPXESG than we do with the VIX and the SPY. This is because the VIX measures market fears and higher stability of the environmental fund would imply a lesser correlation to market fears/volatility. My regressions (check appendix) support the research at Morgan Stanley: I found a coefficient of -2.1066 for

VIX on SPXESG and coefficient of -2.5347 for VIX on SPY, and these coefficients are statistically different from one-another. An increase in the VIX by one unit is related to a larger decrease in the regular S&P 500 ETF than in the ESG fund. I also found the CAGR for both investments. The CAGR for SPXESG is 17.54% while for the SPY it is 15.34% - indicating that not only was the ESG fund more stable, but it was also better performing during this time span. While volatility is not good for the market, the ESG investment fairs better both in returns and stability, which lends proof that investor skepticism in ESG passive investing is based not in facts but in investor psychology.

Conclusion:

It is clear that the human mind isn't totally rational in making monetary decisions. We would like to base our decisions on facts, but because of risks and the status quo, it takes a while for us to adopt optimal investment strategies. If investing for the long term, it might be advisable to invest in cheap ETFs that mimic a high potential index. Further, it might be even more advisable to invest in passive ESG funds, not only to support one's personal preferences, but also to minimize volatility.

Appendix:

```
lm(formula = data[data$Security == "SPXESG", ]$Close ~ data[data$Security ==
    "VIX", ]$Close)

Residuals:
    Min      1Q  Median      3Q     Max
-86.353 -43.229  -3.807  46.892  96.632

Coefficients:
                                     Estimate Std. Error t value Pr(>|t|)
(Intercept)                          364.0269     5.3134  68.511   <2e-16 ***
data[data$Security == "VIX", ]$Close  -2.1066     0.2114  -9.965   <2e-16 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 52.94 on 643 degrees of freedom
Multiple R-squared:  0.1338,	Adjusted R-squared:  0.1324
F-statistic: 99.31 on 1 and 643 DF,  p-value: < 2.2e-16
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*SPXESG on VIX

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lm(formula = data[data$Security == "SPY", ]$Close ~ data[data$Security ==
    "VIX", ]$Close)

Residuals:
    Min      1Q  Median      3Q     Max
-94.561 -47.560  -3.762  52.887 104.453

Coefficients:
                                     Estimate Std. Error t value Pr(>|t|)
(Intercept)                          427.0587     5.8188   73.39   <2e-16 ***
data[data$Security == "VIX", ]$Close  -2.5347     0.2315  -10.95   <2e-16 ***
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Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 57.98 on 643 degrees of freedom
Multiple R-squared:  0.1571,	Adjusted R-squared:  0.1558
F-statistic: 119.9 on 1 and 643 DF,  p-value: < 2.2e-16
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*SPY on VIX

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