The trading strategy our team seeks to deploy is sustainable profitability, and whether sustainable profitability reflects stronger performance. To test our strategy, we sought to track the investments of the “ESG MSCI USA ETF”, and we then replicated this ETF’s strategies to test their validity. This ETF tracks the results of investments composed of U.S companies with positive **social, environmental, and governance characteristics (ESG)**. The attractiveness of this ETF stems from the implementation of a passive approach (indexing), where the Funds do not attempt to definitively beat the indexes they track, and they do not hold defensive positions when the market is in a decline. This ETF holds equities that represent some of most notably performing stocks on the market; hence they reflect a strong profitability track record by definition. By implementing our strategy, investors will achieve lower costs and superior after-tax performance, so long as the sustainability strategy proves effective. Actively managed funds would be sub-optimal in comparison to our strategy considering these ETFs select the most ideal securities to effectively track the investment results of U.S companies with positive ESG accolades.

The replicated portfolio implementing our strategy has MSCI ESG coverage percentages over 99%, and a “Quality Score” (fund’s ability of underlying holdings to manage long-term risks from ESG factor exposure) of 6.5; scaled 1-10. Our sustainability strategy weighs heavily on the reliance of optimal asset allocation in equities, mostly with exposures in IT, Health Care, Financials, Industrials, and Communication. Our advantage over other strategies stems from our honing on low cost and diversification in equities at optimal weights for top-notch performance. To effectively replicate our strategy, we took a five-year, monthly past returns approach, to test whether the sustainability (ESG) factors play a role in successful performance of our replicated portfolio, and we ultimately sought to prove or disprove its validity.

Our strategy also screens out controversial and volatile industries like tobacco and weapons to avoid unnecessary risk, as well as constraining sector weights to +/- 5% and constituent weights to +/- 2% of the broad market index. This allows for optimal portfolio formation. We plan to challenge these “proven” deliverances of sustainability, and gage exactly how much sustainability is embedded in our replicated portfolio.

Some of the main risks associated with our strategy are Underinvestment risk (threshold limitations with potential for adverse effects on liquidity/performance), Sector risk (adversely effected by supply/demand), tracking error risk (divergence from fund’s underlying index), Equity securities risk, and Passive Investment risk (avoiding defensive position when markets decline). The fees associated with our implementation is a 0.15% net expense ratio, which reflect managements fees. A benefit of this domestic housed ETF is the avoidance of foreign taxes. Some additional costs include charged standard creation and redemption transaction fees to offset any transfer and other transaction costs.

The data we used to replicate our strategy is drawn from 279 asset’s past returns dating back to December of 2013. We also chose to implement a four-factor model with the market risk premium, SMB (small cap in excess of large-cap), HML (high B/M in excess of low B/M), and RMW (profitability factor premium). Another asset pricing model we chose was a two-factor model, considering exposures in the market risk premium and profitability, exclusively. We also utilized the CAPM and Fama-French three-factor model as means of comparison. ESG data spans two decades at most and is available only for a fraction of companies in the investable landscape, making it difficult to determine the factor premiums. However, we utilized Ken French’s research data to provide us with the four factors necessary for our models.

The four-factor model equation we used is:

(1) R -Rf = a +b(Rm-Rf)+ s(SMB) + h(HML) + c(RMW)+ et

The two-factor model equation we used is:

(2) R -Rf = a + b(Rm-Rf) + c(RMW) + et

The CAPM equation we used is:

(3) Ri = Rf + b(Rm-Rf)

The Fama-French three-factor model equation we used is:

(4) R – Rf = a + b(Rm-Rf) + s(SMB) + h(HML) + et

RMW can be interpreted as differences between the returns on diversified portfolios of stocks with robust and weak profitability. As attested by Ken French and his five-factor asset pricing model, since B/M and profitability are correlated, the HML slope in this model is an “unknown mix of exposures to value and profitability.” This does not apply to our replicated portfolio because we did not form our portfolios on differentiations in value, but rather with firms who operate with strong sustainable profitability attributes; i.e. positive social, environmental, and governance characteristics. The relative importance of our consideration of this fourth factor, RMW, is that the three-factor model disregards a lot of the relation between expected returns and expected profitability for firms in a portfolio.

Why did we choose to focus on ESG characteristics, and what value potential do they have?

Our team understands the value in sustainable profitability, and we took it upon ourselves to research just how well these contributing firms were performing. As a result, we did some industry and sector reporting to formulate a sound understanding as to what is causing these immense successes. Then, we sought to replicate the ETF based on the recent performances by sector, and allocated weights to individual equities accordingly.

First off, above-expectation in sales for software, cloud-based services, and hardware boosted the performance of IT firms yielding **positive ESG characteristics**. These represent the greatest contributors to our replicated portfolio’s return, given the reporting period we measured. Attributed weights reflect this in our portfolio. Positive economic conditions and relatively low inflation helped IT companies appropriate rising customer demand without the significant straining on labor costs, resulting in impressive earnings for the entire sector. The software and services industry lead sector output, as firms continued to progress toward cloud computing solutions. Our next task was recognizing “socially responsible” companies in the Financial sector. This sector provided vital contributions, as well, to our replicated portfolio’s return, considering the sector thrived from a progressively expansive economic landscape, and from the recent corporate tax cuts. Several market analysts, specifically over at MarketWatch and NASDAQ forecasted that corresponding corporate tax savings would provoke economic merger and underwriting activity. Consumer discretionary companies with positive ESG characteristics were additional contributors to the replicated portfolio’s return. U.S. consumer spending rose as progressive job growth drove the unemployment rate to ~4%.

Some of our largest held positions consist of large cap stocks from the information technology, consumer discretionary, telecommunications, financial, and healthcare sectors. When selecting these top holdings, we were looking to select best of breed stocks from top sectors. While looking for socially responsible companies we also were looking for top performers relative to their peers in some of the most robust sectors. In the information technology sector some of our top holdings include Apple, Amazon, Google, and Facebook. Relative to their sector these stocks have experienced large increase in returns over a 5-year prospectus. For example, based on 5-year returns AAPL has returned 24%, Amazon has returned 37% while the information technology sectors ETF VGT had returns of 18%. In the consumer discretionary space some of our largest holdings are Johnson & Johnson and home depot. Over the same 5-year span JNJ has returned 11% compared to a 9% return of comparable major drug manufacturers, HD returned 21% compared to 19% return of comparable home improvement stores. In the telecommunications space some of our largest holdings include Verizon and Cisco. Verizon has had a 5-year return of 7% while similar telecom services returned just 2%. Similarly, Cisco has experienced a 5-year return of 17% while the similar communication services sector only returned 11%. In the financial sector some of our top holding include J.P Morgan, and bank of America. The 5 year returns of the two have been 18% and 15%. These returns can be compared to the globally banking sector boasting only 5% 5-year returns. In the energy sector one of our top holdings in Exxon mobile. In the health sector our top holdings consist of united healthcare and Merck. Looking at the trailing returns of these companies UNH has had returns of 32% when compared with similar health care plan companies with 23%, MRK has posted returns of 10% while similar pharmaceutical companies have returned 5%. Our stock selection process for our top holdings was to initially focus on social responsible corporations but then dive deeper to find best of breed stocks relative to their sectors.