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**The Correlation between Environmental, Social,
and Governance (“ESG”) and Stock Performance**

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Abstract

The rise of sustainability-related concerns has led to many ways to measure company sustainability, including Environmental, Social, and Governance (also known as “ESG”). As companies continue to spend money on ESG infrastructure and initiatives, many people are challenging the benefits of these costs. One way to encourage companies to continue to become “more green” is by proving the value of sustainability to investors. If “sustainable” companies are more valuable to investors, investors may be willing to purchase stocks at a premium, which positively affects the company. This research aimed to observe the correlation between ESG and value to investors by comparing stock price change and return on invested capital of 10 “sustainable” companies, as defined by the S&P 500 ESG Index, and 10 non-ESG companies headquartered in the US across five of the 11 stock market sectors. All secondary data was found using Mergent Online, company 10-Ks, Yahoo Finance, and Refinitiv Eikon. The results showed no findings, meaning that we cannot reach any conclusions about the value of ESG to investors from our sample. Interpretations and reasons why are discussed. Although, we believe continued research with fewer limitations may be able to identify a correlation.

Introduction

In recent years, climate change has become a focal point for media and science alike. The United Nation's most recent "United in Science" report urges real and immediate change related to climate change. As atmospheric greenhouse gas and temperature continue to rise, "global tipping points in the climate system cannot be ruled out," meaning that there will be severe, irreversible consequences to our ecosystems (Stuart *et al.*, 2022). Corporations have an important role in acting against climate change. One way to incentivize corporations to act now is by proving the economic benefits of being more sustainable.

Environmental, Social, and Governance (also known as "ESG"), a popular measure of company sustainability, has become top of mind in the public, evidenced by consumers and investors who are willing to pay a premium from companies with ESG-related improvements (Henisz *et al.*, 2019). Additionally, sustainability ranks high among the list of important factors that customers care about when purchasing their products and/or services. However, public companies have a dual requirement to serve their customers, but also to provide lucrative returns for their investors (Weiss, 2013). One way investors can invest in ESG stocks or pick individual ESG investments is through the S&P 500 ESG Index, which is a stock market index that tracks stock performances of 500 United States, publicly traded companies that meet certain sustainability criteria. The S&P 500 ESG Index picks companies based on their S&P DJI ESG Scores and other ESG-related data.

There are major limitations to becoming a more ESG-friendly company. One includes the ambiguity surrounding the term "sustainability." Depending on the location and business, sustainability could mean reducing carbon emissions, lowering consumption, reducing electricity usage, etc. (Frazee, 2019). The second major limitation is cost. Increasing sustainability

incentives can raise input costs, which can lead to lower margins, thus potentially lowering company profits and the value to investors. Businesses will have to consider if they need to remodel buildings to support new energy infrastructure, reexamine pricing to account for new recycling costs, etc. These are all valid concerns that need to be addressed when a company is considering new sustainability measures to take.

This research paper explores the correlation between sustainable companies and company value to investors. We propose two related research questions. First, *are “sustainable” companies, as defined by the S&P 500 ESG Index, more valuable to investors, as measured by stock price change, as compared to non-ESG companies?* Second, *are “sustainable” companies, as defined by the S&P 500 ESG Index, more valuable to investors, as measured by return on invested capital (ROIC), as compared to non-ESG companies?*

Literature Review

Prior literature has found evidence that the market reacts to ESG-related news. Capelle-Blancard and Petit (2017) found that negative ESG-related news causes a greater reaction in stock market value than comparable positive news does. This study is consistent with prospect theory, which theorizes that individuals react more to losses than comparable gains. Similarly, Serafeim and Yoon (2021) analyzed how stock prices react to ESG news. They found that changes in stock price were usually a response to financial news rather than non-financial, ESG-related news. This result is expected given that the price of a stock should in theory reflect the value, or future profitability, of a company.

Additionally, the research by Serafeim and Yoon contradicts Capelle-Blancard and Petit (2017) research because they claim that stock prices react more strongly to positive news that receives more attention and is “related to social capital issues relative to natural or human capital issues” (Serafeim and Yoon, 2021, p. 16). This discrepancy could be a result of the changing relevance of ESG news over time. Capelle-Blancard and Petit’s paper was published in 2017, whereas the more recent Serafeim and Yoon paper was published in 2021, almost four years later. Now that ESG has gripped the attention of consumers and investors alike, its importance to stock valuation has also seemingly increased.

Prior research has also examined the correlation between socially responsible investing (also known as “SRI”) and financial performance. Barnett and Saloman (2006) found that SRI, in the form of mutual funds that screen based on community relations, outperformed those that did not. One possible explanation the authors give for their findings is that SRI funds are better managed and are typically more stable firms (Barnett and Saloman, 2006). Christophe Revelli

and Jean-Laurent Viviani (2015) found no statistically significant relationship between SRI and stock price performance, indicating that there is no real consensus among literature in this area.

The connection between financial performance in the market and socially conscious actions of companies has been heavily researched in the last decade. De Mendonca and Yan Zhou (2019) investigated the link between ecological sustainability and financial performance. The authors note that ecological sustainability is defined as “the ability of one or more entities, either individually or collectively, to exist and flourish... for lengthy time frames, in such a manner that the existence and flourishing of other collectivities of entities is permitted at related levels and in related systems” (De Mendonca and Yan Zhou, 2019, p. 1583). They found that companies’ environmental orientation is an important link with debt ratio, profitability, and market value (De Mendonca and Yan Zhou, 2019). Environmental orientation refers to how a company sees environmental sustainability within its own corporate environment. De Mendonca and Yan Zhou (2019) found that businesses whose environmental orientation is collectively focused, meaning companies who see their environmental action as part of a greater effort, have a greater positive impact on their own financial performance, in contrast to companies who have an individualistic environment orientation.

Similarly, Suhong Li, Thomas Ngniatedema, and Fang Chen (2017) studied the impacts of green initiatives and green performance on the financial performance of companies in the manufacturing and service industries. The authors describe green initiatives as actions taken by manufacturing industries to reduce their footprint throughout the entire life cycle of their product(s) (Li *et al.*, 2017). Green performance is defined as the impact of these initiatives on the natural world (Li *et al.*, 2017). The authors found that green initiatives and green performance generally have a positive long-term impact on companies’ financial performance, but that the

degree of impact varies by sector, with consumer discretionary and consumer staples being the most impacted (Li *et al.*, 2017).

More current related research has focused on stock performance during the COVID-19 pandemic. Dongyi Zhou and Rui Zhou (2021) found that in China companies with higher ESG scores were less volatile to the stock market during the beginning of the pandemic, making ESG investment less risky to investors. Similarly, research on the European markets during COVID-19 found that firms with higher ESG scores had lower volatility and performed better than their non-ESG counterparts when authorities released numbers related to COVID-19 cases and deaths (Cardillo, *et al.*, 2022). This is important to our research because we are focusing on data from 2020-2022, looking at time periods during the COVID-19 pandemic.

Lastly, researchers have considered if investors are willing to exchange slightly reduced return on invested capital (ROIC) for increased sustainability. Research by James Chalmers, Emma Cox, and Nadja Picard (2021) found that about $\frac{1}{2}$ of investors were willing to accept some decrease in rate of return in exchange for investing in a sustainable company. In further breaking that number down, they found about $\frac{1}{3}$ of investors are willing to accept an investment return of up to 1% less for an ESG investment compared to a non-ESG investment (Chalmers *et al.*, 2021). The study demonstrates that while establishing sustainability practices in a company may be costly, it is something that many investors care about enough that they are willing to accept a lower ROIC.

Through prior literature, we have established that the markets react to ESG news and initiatives, SRI may be fruitful for investors, and investors are willing to accept the costs of more sustainable practices. Now we must establish if “sustainable” companies are more valuable than those that are not to investors, as measured by stock price change and ROIC.

Methods

For our sample, we chose to use the convenience sampling technique, meaning that we chose based on what was most easily accessible. By doing so, we were able to work within our limited time period because picking the sample was quick and convenient. However, convenience sampling made our results have poor generalizability. Additionally, we defined sustainable companies as being on the S&P 500 ESG Index, a stock market index that tracks stock performances of 500 United States that meet the criteria of being sustainable based on the S&P DJI ESG Scores and other ESG-related data.

Due to time constraints, we picked 10 “sustainable” companies and 10 non-sustainable companies from five of the 11 stock market sectors. Our hope was that 20 total companies would be enough to see some comparison between the two categories. The 11 stock market sectors, defined by Global Industry Classification Standard, are a way to sort publicly traded companies in order to diversify a portfolio. We chose the following five sectors: industrials, energy, real estate, consumer discretionary, and financials. We chose industrials, energy, and real estate because those sectors tend to have high pollution rates. We chose consumer discretionary and financials to ensure our sample included some household names that would be easily identifiable.

After choosing the sectors, we compared companies listed in SPDR S&P 500 ESG ETF (EFIV) and SPDR S&P 500 ETF (SPLG). Since we were not able to find a list of companies listed in the S&P 500 ESG Index or S&P 500 Index, we picked our sample by comparing companies in the schedule of investments report of SPDR S&P 500 ESG ETF (EFIV) and SPDR S&P 500 ETF (SPLG). SPDR (“Standard & Poor’s depositary receipt”) are exchange-traded funds (“ETF”) that track S&P Indices (e.g., S&P 500 Index and S&P 500 ESG Index), providing the same value of diversification as mutual funds with the flexibility to trade like common stock.

If a company was present on both ETFs, the company could be included in our sample of 10 companies for the ESG group, but not the non-ESG group, since the company met the criteria to be considered “sustainable.”

The final 20 companies were chosen through matching, which allowed us to use a smaller sample size and reduce confounding. All companies are headquartered in the United States in order to ensure that all companies follow the same rules and regulations related to ESG. All companies had to be large companies as defined by having market capitalization between \$10 billion and \$200 billion in order to ensure that all companies had similar resources to devote to ESG initiatives; we did our best to keep that range smaller between comparable companies. Within each sector, we matched similar companies together based on the products and services offered. For example, within industrials, we matched Delta Air Lines to United Airlines Holdings since they are both airline companies. Table 1 provides a list of all our samples.

Table 1. Companies in Sample

Stock Market Sector	ESG		Non-ESG	
	Company (NYSE Stock Ticker)	Market Cap (in billions of US \$)	Company (NYSE Stock Ticker)	Market Cap (in billions of US \$)
Industrials	General Electric Co. (GE)	93.29	3M Co. (MMM)	71.39
	Delta Air Lines, Inc. (DAL)	22.76	United Airlines Holdings, Inc. (UAL)	14.50
Energy	ConocoPhillips (COP)	161.32	EOG Resources, Inc. (EOG)	83.59
	Devon Energy Corp. (DVN)	45.09	Phillips 66 (PSX)	50.21
Real Estate	Equinix, Inc. (EQIX)	59.96	Crown Castle Intl. Corp. (CCI)	60.05
	Realty Income Corp. (O)	41.00	Public Storage (PSA)	53.18
Consumer Discretionary	Dollar Tree, Inc. (DLTR)	36.53	Dollar General Corp. (DG)	57.28
	YUM! Brands, Inc. (YUM)	34.97	Chipotle Mexican Grill, Inc. (CMG)	40.78
Financials	Citigroup, Inc. (C)	93.78	Wells Fargo & Co. (WFC)	182.71
	PNC Financial Services Group, Inc.	66.08	Truist Financial Corp. (TFC)	61.08

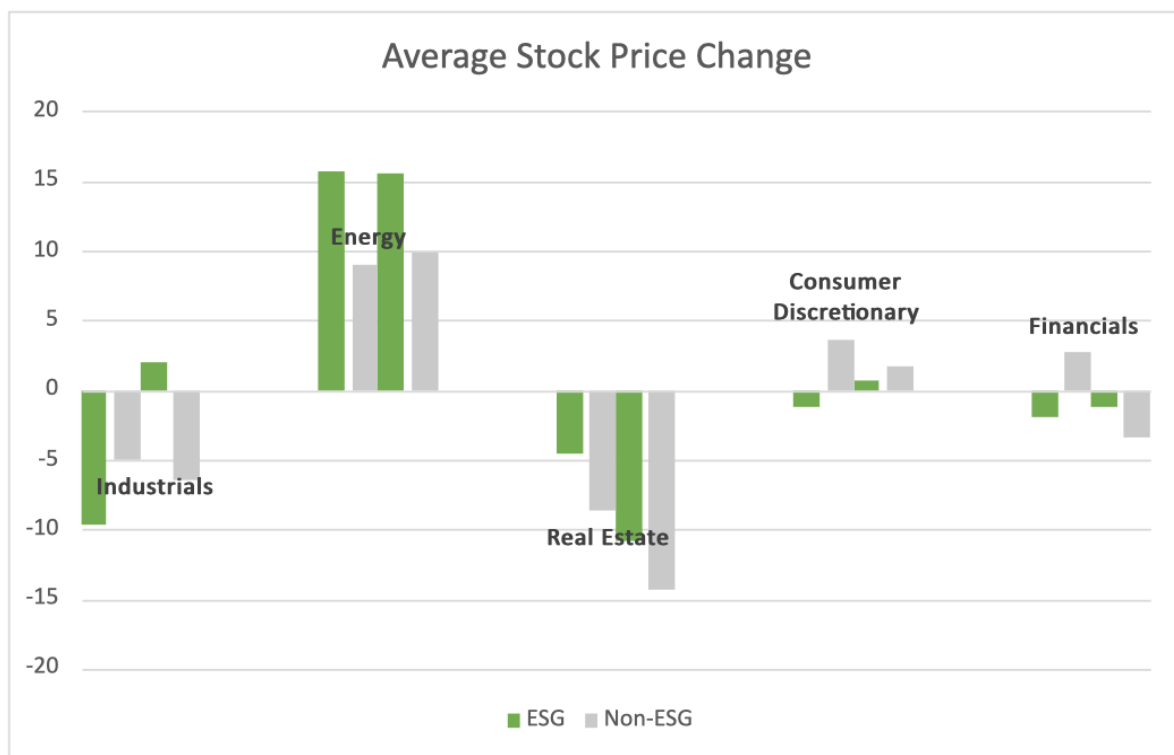
Data from Mergent Online.

All data used to compare stock price change and ROIC was secondary data pulled from company 10-Ks, Yahoo Finance, and Refintiv Eikon. We then used comparative statistics for data analysis by comparing stock price change and ROIC of the ESG group to the non-ESG group. For ROIC, we also considered industry average.

Results

All data regarding the sample, industry average, stock price change, and ROIC, as well as respective results, are illustrated in Figures 1, 2.1, and 3.1-3.3. All figures provide an illustration of comparative statistics between ESG and non-ESG companies within the sample. As shown in Figure 1, results showed no findings in the difference between average stock price change of ESG and non-ESG companies. Energy is the only sector where both ESG companies outperformed the two non-ESG companies. The consumer discretionary sector is the only sector where both non-ESG companies outperformed the two ESG companies. For all other sectors, the results were inconclusive. Additional information in Table 2 of the [Appendix](#).

Figure 1. Average Stock Price Change of ESG and non-ESG Samples during 2022



Data from Yahoo Finance.

As shown in Figure 2.1, results showed that the SPDR S&P 500 ESG ETF (EFIV) and SPDR S&P 500 ETF (SPLG) had similar movements in stock price change, primarily due to them being composed of similar companies. However, the ESG ETF slightly outperformed the non-ESG ETF over the time period, but the difference is so small that it is likely insignificant and immaterial to investors. This is an indication to investors that ESG investing may not be a more profitable investing strategy, yet. Companies can also conclude that highlighting ESG initiatives will not result in a significant increase in stock performance. Additional information in Figures 2.2-2.6 of the [Appendix](#).

Figure 2.1. Stock Price Percentage Change of ESG ETF (Green) and non-ESG ETF (Red) from 7/27/20 - 11/30/22

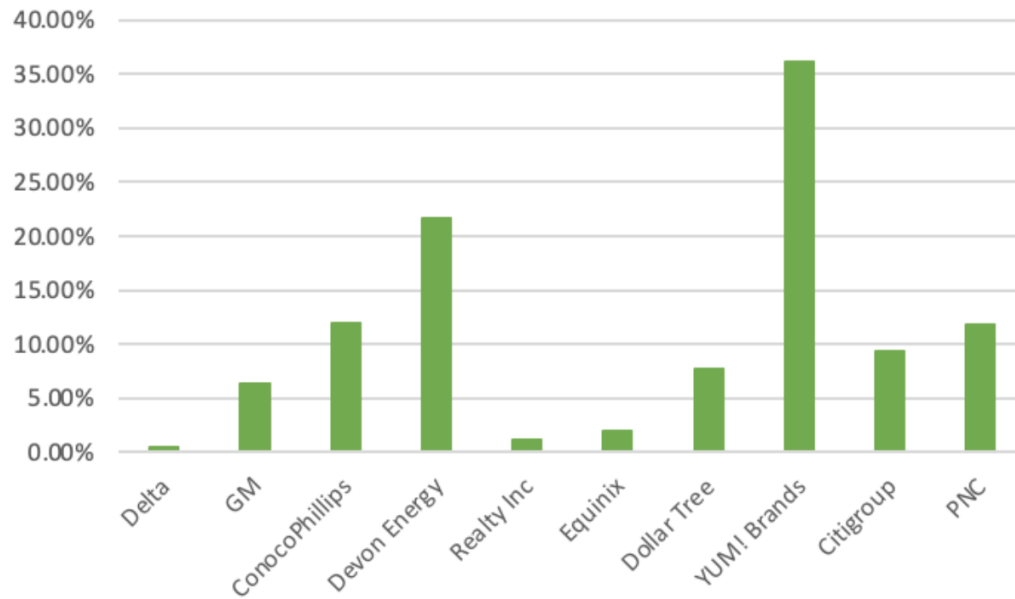


Data from Yahoo Finance.

As shown in Figures 3.1 and 3.2, results showed no findings in the difference between the average ROIC for ESG and non-ESG companies. Notably, two ESG companies (Devon Energy and YUM! Brands) significantly outperformed their non-ESG counterparts. However, there are not enough ESG or non-ESG companies with higher ROIC than their counterparts to draw any meaningful conclusions on the value of ESG to investors as measured by ROIC. The only

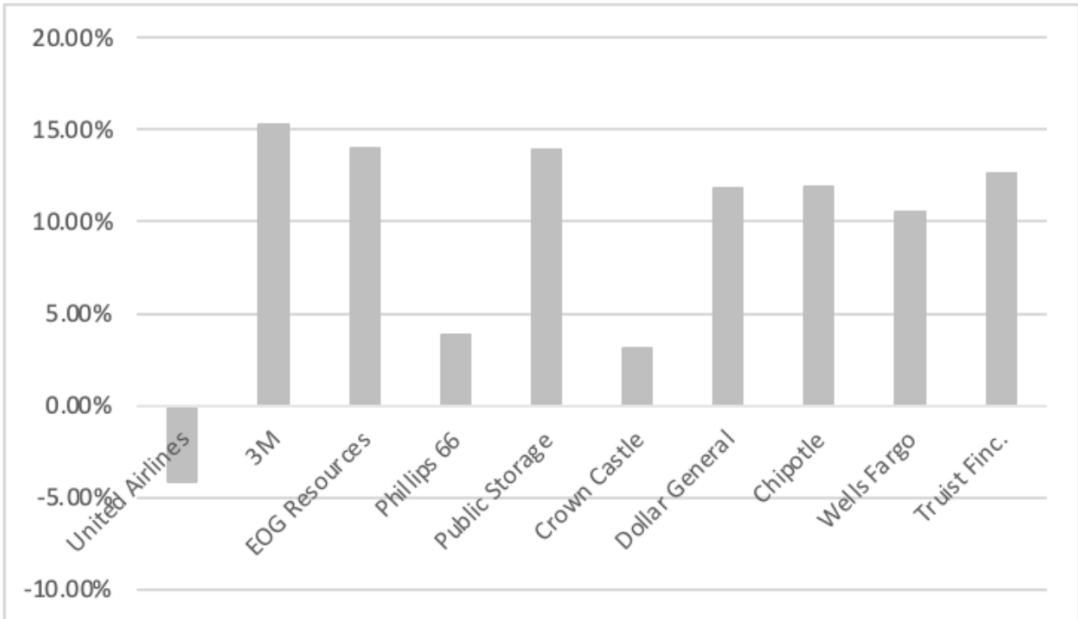
company to have a negative ROIC was United Airlines, a non-ESG company. Additionally, only 3M and ConocoPhillips performed close to the average ROIC for each sector, as shown in Figure 3.3. All other companies either had higher or lower ROIC, compared to the sector averages. Additional information in Figure 3.4 of the [Appendix](#).

Figure 3.1. Average ROIC for ESG Companies in 2021



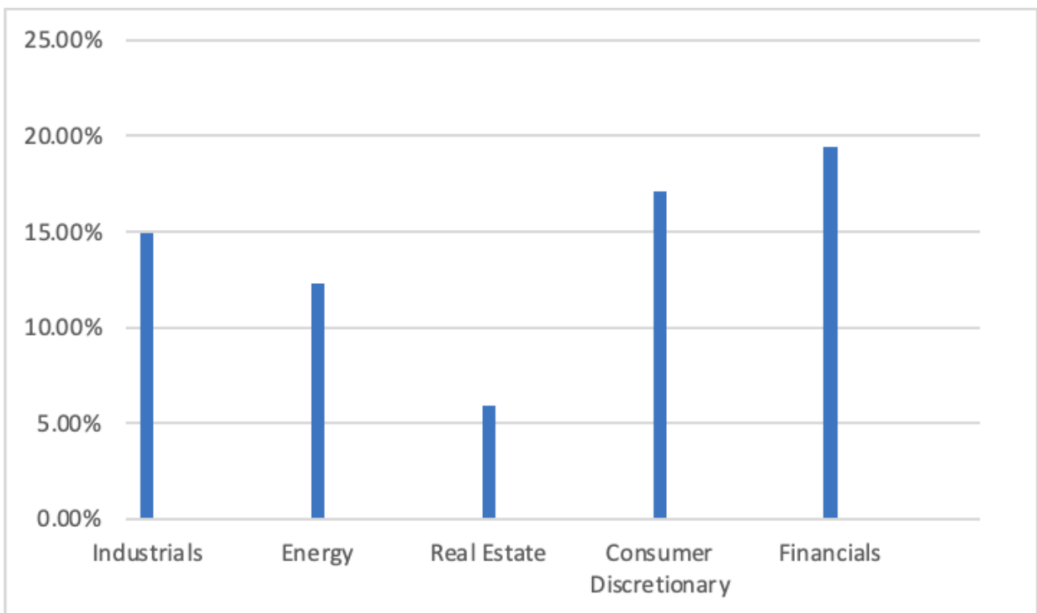
Data from Yahoo Finance.

Figure 3.2. Average ROIC for non-ESG Companies in 2021



Data from Yahoo Finance.

Figure 3.3. Average ROIC for Stock Market Sector Averages in 2021



Data from Yahoo Finance.

Discussion and Interpretation

In the analysis of our sample, it was not obvious that a company has more intrinsic value due to being identified as an ESG company. We were ultimately unable to answer both of our research questions because there were no findings. Since this was the primary focus of our research, we believe that there are multiple reasons why we did not find conclusive results.

One explanation for our results is that there are other factors that affect stock price change besides ESG. When looking at the data regarding average stock price change of each of the companies in our sample, the companies in each stock market sector moved similarly, regardless of being an ESG or non-ESG company. Companies within the energy sector had significantly higher average stock price change compared to companies in the other sectors we observed. Companies in consumer discretionary and financials sectors experienced little change in average stock price change over the period we collected data. Companies in industrials, with one exception, and real estate sectors experienced negative average stock price change. The patterns regarding movement in stock market sectors made it clear that sector designation had a greater effect on average stock price change than identifying a company as ESG or not. This could be because companies within the same sector are similarly affected by market forces. For example, negative news relating to the pollution of real estate companies would affect the attractiveness, or lack thereof, to investors of all real estate companies, resulting in a decrease in investors buying real estate-related securities.

A second explanation for our results is that our sample had limitations. As discussed in the methods section of the paper, our sample was selected through convenience sampling to represent only five different sectors in the S&P Index. Both the S&P 500 ESG index and the

S&P 500 index are composed of hundreds of companies with diverse products, services, and missions. Naturally, our small sample cannot represent all companies. Another point to consider, when analyzing our data, was that the industry average ROIC outperformed most of the companies within our sample, except for five. This occurred regardless of whether a company was on the ESG index or not. One explanation for this is that our sample consisted of all large-cap companies. Large-cap companies typically do not have the same volatility or change in ROIC when compared to small or mid-cap companies because smaller companies are more growth and/or return-oriented.

Another explanation for our results is tied to our literature review and how markets react to ESG-related news. Prior research found that negative news affects financial markets more than positive news. Assuming that good ESG-related news is just as common as bad ESG-related news, bad news would have a greater effect on stock prices. News is just one example of external variables that affect a company's stock price change and ROIC. Other examples include technological, economic, and political factors. Since we were unable to control for all external variables, they greatly affected our sample, therefore, leading to us finding inconclusive results.

Given our results, we did not find evidence that "sustainable" companies are objectively more valuable to investors, as measured by stock price change and ROIC, as compared to non-sustainable companies. However, despite our limitations, there are valuable contributions from our research, especially related to areas of future research, as discussed below.

Conclusions, Implementations, and Recommendations

Our research selected 20 large companies, with market capitalization between \$10 and \$200 billion, and asked whether the 10 “sustainable” companies, as defined by the S&P 500 ESG Index, are more valuable to investors than 10 non-sustainable companies. We defined value to investors in two different ways. The first way we defined value was by stock price change, which is represented in Figures 1 and 2.1. The second way we defined the value was by average return on invested capital (ROIC) during the 2021 fiscal year, which is represented in Figures 3.1-3.3. When approaching this research question, we expected non-ESG companies to underperform compared to ESG companies, due to the prevailing idea in business today that companies that focus on ESG do better in the current economy. However, when we looked at the stock price change and ROIC of these companies, we were unable to draw any conclusions about our results.

Our research had several limitations including resource and time limitations, as a result, we had a small sample size and a lack of variation in company size. The small sample size, which included only large companies, was necessary for our research project parameters. We needed to keep the study focused and narrow due to time constraints. However, this meant that we were not able to gain a complete understanding of the value of ESG companies to investors. A larger sample size with more varied companies may have resulted in better conclusions about the correlation between ESG and investor value. A larger sample size would increase the confidence and precision of our results, as well as decrease the risk of reporting false findings. By not including small and mid-cap companies, we are not able to analyze the effect of company size on stock price change and ROIC.

The narrow focus of our study (relying on mostly data from the last two years) meant that we could not grasp the full effect of the ESG over time. A longer time period may have more

accurately shown if the higher return on invested capital is due to unique qualities inherent to ESG companies, or if there are some other factors at play specific to those companies regardless of their status on the S&P 500 ESG Index. Additionally, if we were able to conduct our research over a longer time period, we could do a longitudinal study, which would increase the accuracy of our data and the validity of our results.

We recommend future research go back at least three to five years. This could show if stock price changes are truly impacted by a company's status on the ESG Index. Additionally, further research should include an analysis of small and mid-cap companies as well as the large-cap companies we researched. Sustainability in these markets is a growing issue, and new approaches to integrating these policies and changes into business practices could come from the grassroots or small company level. Our research focus misses this segment, and it should be studied in the future.

Despite our research not showing a correlation between ESG and greater company value to investors, ESG investing still has its merits, evidenced by many investors portioning a percentage, if not all, of their portfolio to be invested in ESG companies. ESG companies are typically held in better regard in the public eye, meaning there are non-numerical benefits of ESG. Additionally, younger generations have greater concern for “going green,” which may make ESG investments more valuable in the future.

Works Cited

- Barnett, Michea L., and Robert M. Salomon. “Beyond Dichotomy: the Curvilinear Relationship between Social Responsibility and Financial Performance.” *Strategic Management Journal*, vol. 27, 13. Sept. 2006, pp. 1101-1122.
<https://doi.org/10.1002/smj.557>
- Capelle-Blancard, Gunther, and Aurélien Petit. “Every Little Helps? ESG News and Stock Market Reaction.” *Journal of Business Ethics*, vol. 157, 18 Sept. 2017, pp. 543–565. <https://doi.org/10.1007/s10551-017-3667-3>.
- Cardillo, Giovanni, et al. “COVID-19, ESG Investing, and the Resilience of More Sustainable Stocks: Evidence from European Firms.” *Business Strategy and the Environment*, 2022, <https://doi.org/10.1002/bse.3163>.
- Chalmers, James, et al. “The Economic Realities of ESG.” *PwC*, 28 Oct. 2021, <https://www.pwc.com/gx/en/issues/reinventing-the-future/take-on-tomorrow/download/sbpwc-2021-10-28-Economic-realities-ESG.pdf>.
- De Mendonca, Taryn, and Yan Zhou. “What Does Targeting Ecological Sustainability Mean for Company Financial Performance?” *Business Strategy and the Environment*, vol. 28, no. 8, 2019, pp. 1583–93, <https://doi.org/10.1002/bse.2334>.
- Frazee, Gretchen. “4 Reasons It's Hard to Become a Sustainable Business.” PBS, Public Broadcasting Service, 23 Sept. 2019, <https://www.pbs.org/newshour/economy/making-sense/4-reasons-its-hard-to-become-a-sustainable-business>.

Henisz, Witold, et al. “Five Ways That ESG Creates Value.” *McKinsey Quarterly*, Nov. 2019, <http://dl.n.jaipuria.ac.in:8080/jspui/bitstream/123456789/2319/1/Five-ways-that-ESG-creates-value.pdf>.

Li, Suhong, et al. “Understanding the Impact of Green Initiatives and Green Performance on Financial Performance in the US.” *Business Strategy and the Environment*, vol. 26, no. 6, 2017, pp. 776–90, <https://doi.org/10.1002/bse.1948>.

Mergent Online, <https://www.mergentonline.com/basicsearch.php>.

“Quarterly Report.” *State Street Global Advisors*,

<https://www.ssga.com/us/en/intermediary/etfs/resources/doc-viewer#efiv&third-quarter-holdings>
Refinitiv Eikon, <https://amers2-apps.platform.refinitiv.com/web/Apps/Homepage/>.

Revelli, Christophe, and Jean-Laurent Viviani. “Financial Performance of Socially Responsible Investing (SRI): What Have We Learned? A Meta-Analysis” *Business Ethics: A European Review*, vol. 24, no. 2, 11 Mar. 2015, p. 158-185, <https://doi.org/10.1111/beer.12076>.

Serafeim, George, and Aaron Yoon. “Which Corporate ESG News Does the Market React to?” *SSRN*, 26 Apr. 2021, papers.ssrn.com/sol3/papers.cfm?abstract_id=3832698.

Stuart, Lauren, et al. “United in Science 2022.” *United Nations*, 2022, https://library.wmo.int/doc_num.php?explnum_id=11308.

Weiss, Alan. “The Purpose of A Business.” 30 Jan. 2013, alanweiss.com/the-purpose-of-a-business/.

Yahoo Finance - Stock Market Live, Quotes, Business & Finance News, <https://finance.yahoo.com>.

Zhou, Dongyi, and Rui Zhou. “ESG Performance and Stock Price Volatility in Public Health Crisis: Evidence from COVID-19 Pandemic.” *International Journal of*

Environmental Research and Public Health, vol. 19, no. 1, 2021, p. 202–,

<https://doi.org/10.3390/ijerph19010202>.

Appendix

Table 2. Comparison of ESG and Non-ESG Companies' Stock Price and Stock Price Change in Quarters one, two, and three of 2022]

Sector	Category	Company	Stock Price on April 1, 2022	Stock Price on July 1, 2022	Stock Price on October 1, 2022	Stock Price Change Q1 to Q2	Stock Price Change Q2 to Q3	Average Stock Price Change
Industrials	ESG	Delta	43.03	31.80	33.93	-26.10	6.70	-9.70
	Non-ESG	United Airlines	50.50	36.75	43.08	-27.23	17.22	-5.00
	ESG	GM	37.91	36.26	39.25	-4.35	8.25	1.95
	Non-ESG	3M	144.22	143.24	125.79	-0.68	-12.18	-6.43
Energy	ESG	ConocoPhillips	95.52	97.43	126.09	2.00	29.42	15.71
	Non-ESG	EOG Resources	116.76	111.22	136.52	-4.74	22.75	9.00
	ESG	Devon Energy	58.17	62.85	77.35	8.05	23.07	15.56
	Non-ESG	Phillips 66	86.76	89.00	104.29	2.58	17.18	9.88
Real Estate	ESG	Realty Inc	69.36	73.99	62.27	6.68	-15.84	-4.58
	Non-ESG	Public Storage	371.50	326.41	309.75	-12.14	-5.10	-8.62
	ESG	Equinix	719.08	703.74	566.44	-2.13	-19.51	-10.82
	Non-ESG	Crown Castle	185.21	180.66	133.26	-2.46	-26.24	-14.35
Consumer Discretionary	ESG	Dollar Tree	162.45	165.36	158.50	1.79	-4.15	-1.18
	Non-ESG	Dollar General	237.53	248.43	255.05	4.59	2.66	3.63
	ESG	YUM! Brands	117.01	122.54	118.25	4.73	-3.50	0.61
	Non-ESG	Chipotle	1455.61	1564.22	1498.33	7.46	-4.21	1.62
Financials	ESG	Citigroup	48.21	51.90	45.86	7.65	-11.64	-1.99
	Non-ESG	Wells Fargo	43.63	43.87	45.99	0.55	4.83	2.69
	ESG	PNC	166.10	165.94	161.83	-0.10	-2.48	-1.29
	Non-ESG	Truist Finc.	48.35	50.47	44.79	4.38	-11.25	-3.43

Figure 2.2. Percentage Change of ESG and Non-ESG Selected Industrial Stocks

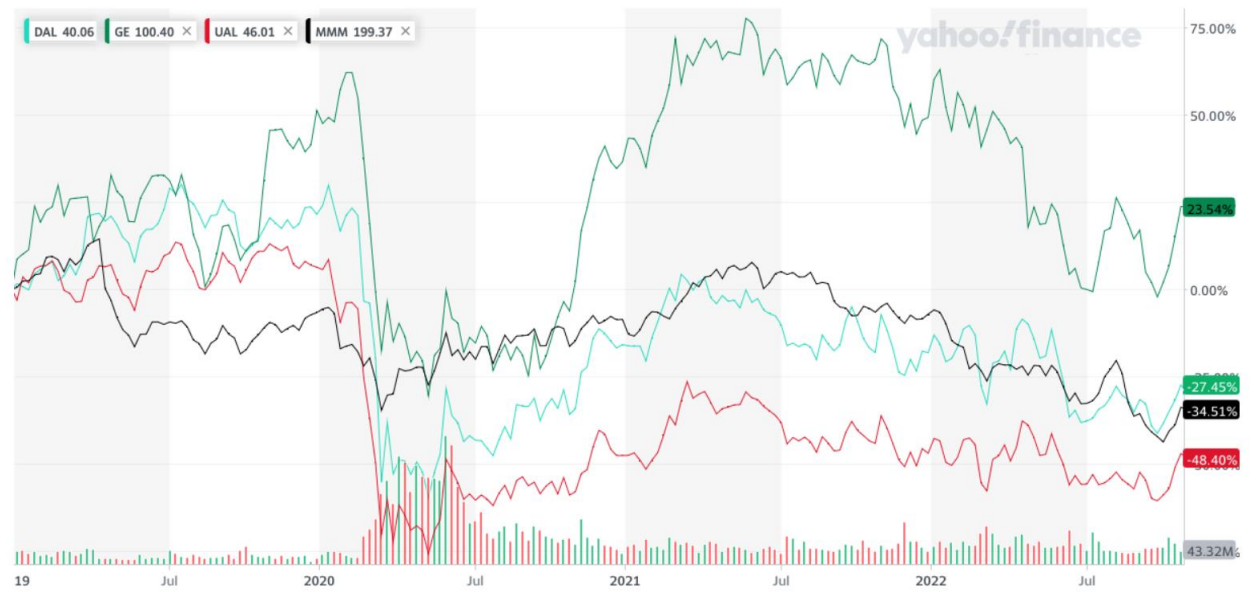


Figure 2.3. Percentage Change of ESG and Non-ESG Selected Energy Stocks

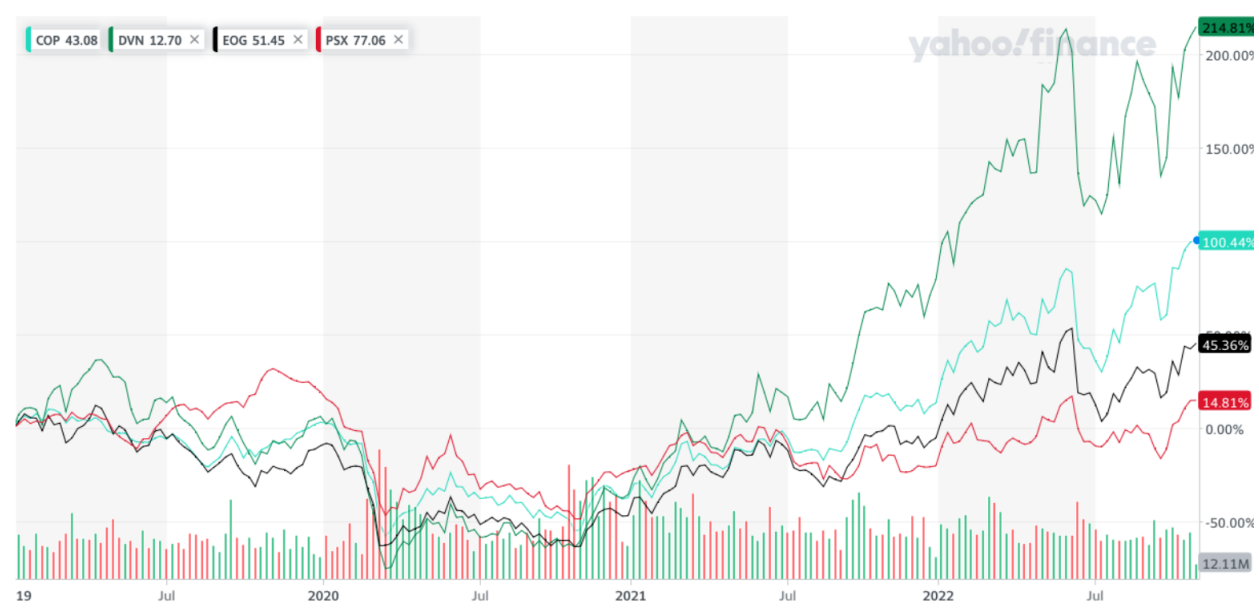


Figure 2.4. Percentage Change of ESG and Non-ESG Selected Real Estate Stocks

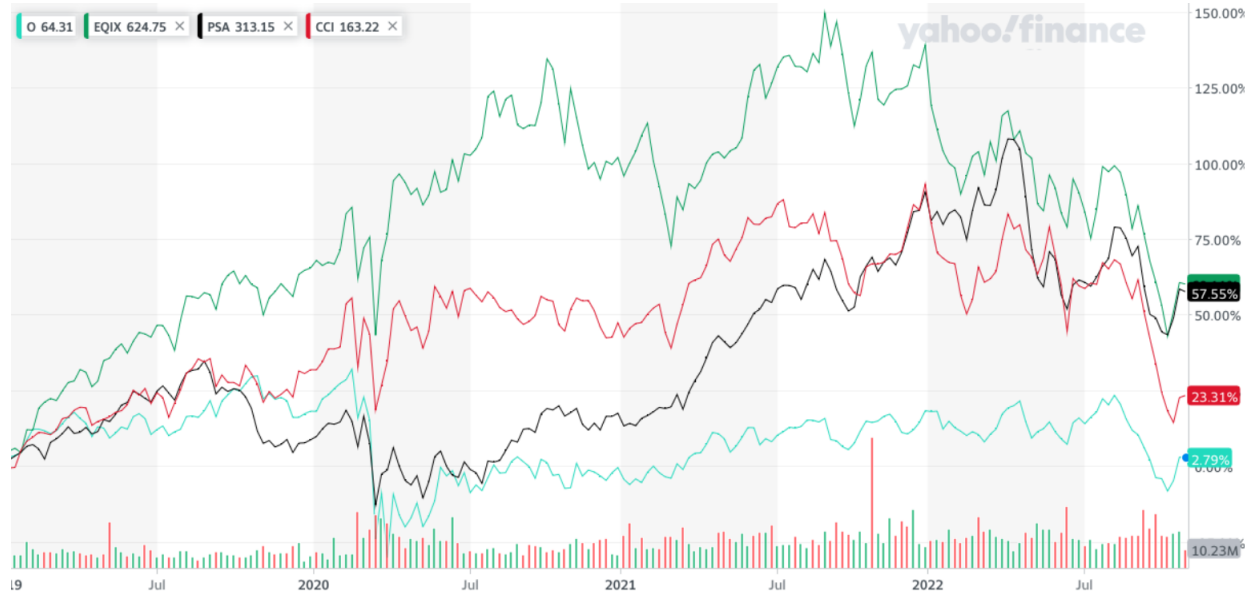


Figure 2.5. Percentage Change of ESG and Non-ESG Selected Consumer Discretionary Stocks

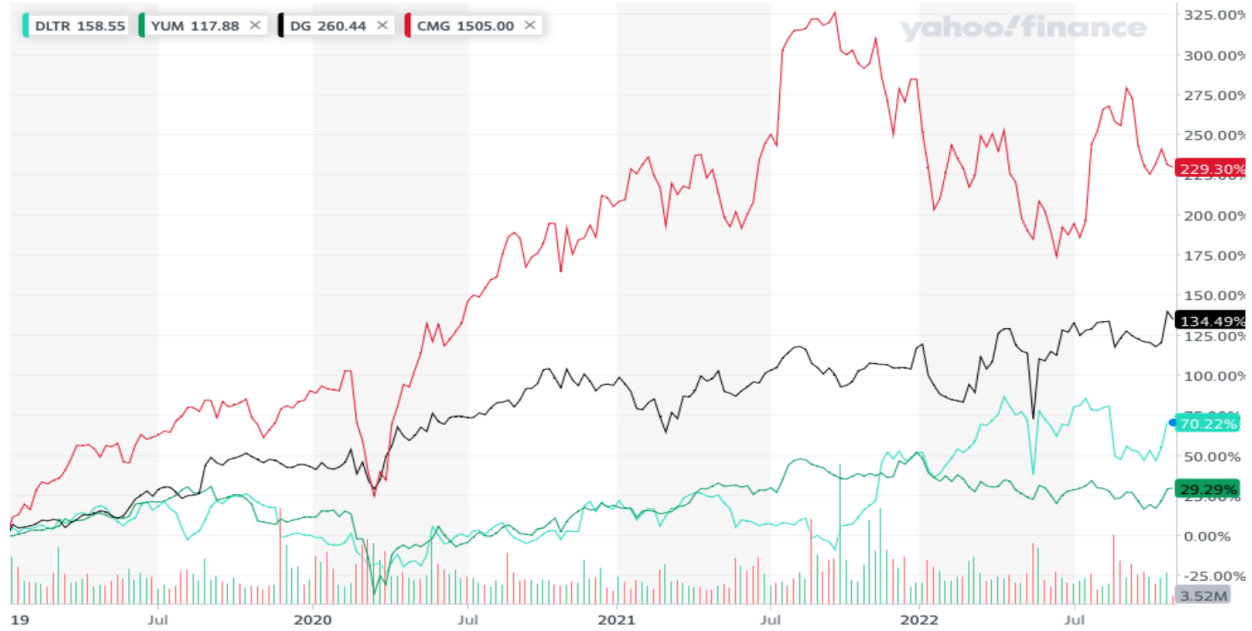


Figure 2.6. Percentage Change of ESG and Non-ESG Selected Financials Stocks |

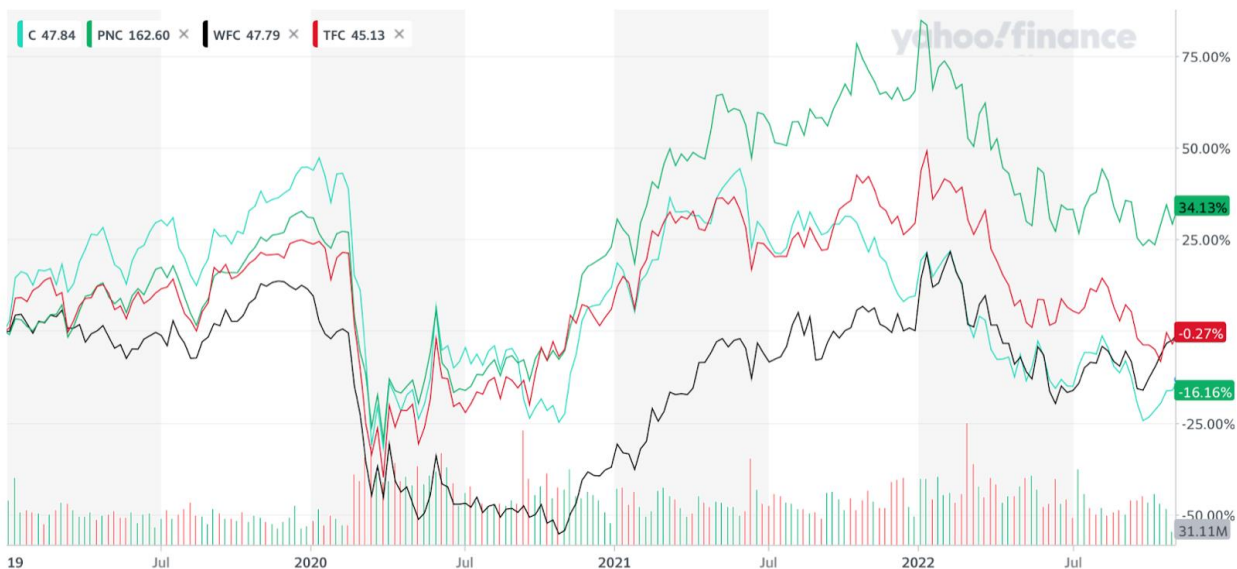


Figure 3.4 ESG and Non-ESG Company ROIC and Industry Average in 2021

Sector	Category	Company	ROIC 2021	Industry Average
Industrials	ESG	Delta	0.50%	14.90%
	ESG	GM	6.30%	
	Non ESG	United Airlines	-4.10%	
	Non ESG	3M	15.30%	
Energy	ESG	ConocoPhillips	11.90%	12.30%
	ESG	Devon Energy	21.70%	
	Non ESG	EOG Resources	14.00%	
	Non ESG	Phillips 66	3.80%	
Real Estate	ESG	Realty Inc	1.20%	5.90%
	ESG	Equinix	1.90%	
	Non ESG	Public Storage	13.90%	
	Non ESG	Crown Castle	3.10%	
Consumer Discretionary	ESG	Dollar Tree	7.70%	17.10%
	ESG	YUM! Brands	36.10%	
	Non ESG	Dollar General	11.80%	
	Non ESG	Chipotle	11.90%	
Financials	ESG	Citigroup	9.30%	19.40%
	ESG	PNC	11.80%	
	Non ESG	Wells Fargo	10.50%	
	Non ESG	Truist Finc.	12.60%	