

University of Nevada, Reno

**5 Year Analysis of Company ESG Ratings Verses Financial Performance**

A thesis submitted in partial fulfillment  
of the requirements for the degree of

Bachelor of Science in Finance and the Honors Program

by

Justin Kuykendall

Dr. Ridinger, Thesis Advisor

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**Justin Kuykendall**

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Garret Ridinger, Ph.D., Thesis Advisor

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Erin Edgington, Ph.D., Assistant Director, Honors Program

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## **Abstract**

Environmental Social Governance adds a new dimension to investing by targeting companies that pursue ethical policies and practices outside of normal business operations. However, there is a lack of information regarding the viability of such investing tactics. To dissolve the ambiguity associated with the lack of information, this thesis aims to compile the ESG ratings currently associated with companies and to measure their stock market performance relative to the overall market as well as individual sectors. The primary method for researching this topic involves finding the holding period returns of every company with an ESG rating in the past 5-years. With the data a linear model will indicate the overall impact of ESG ratings on holding period returns. This information will then allow a conclusion to be made about the viability of ESG ratings as an indicator of company stock performance. Mixed results are anticipated and accounted for by measuring specific industries that may be more capable than others of implementing strong ESG policies while performing better financially.

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## **Introduction**

Environmental Social Governance (ESG) ratings are used to measure the sustainable and ethically conscious practices of a company. They often reference a “company's impact on climate change or carbon emissions, water use or conservation efforts, anti-corruption policies, board member diversity, human rights efforts and community development” (Chen, 2019). Furthermore, they “cover(s) a variety of issues related to the environment (e.g., climate change, energy and water use, carbon emissions), social responsibility (e.g., fair trade principles, human rights, product safety, gender equality, health and safety), and corporate governance (e.g., board independence, corruption and bribery, reporting and disclosure, shareholder protection)” (Galbreath, 2013). By categorizing companies based on their performance of sustainable practices, debate emerges about the overall importance of them. While the moral and ethical implications of ESG policies are most easily advocated for, quantitative analysis is lacking to support the qualitative arguments being made for ESG-based initiatives. Under that consideration, this thesis aims to analyze the recent 5-year stock market performance of companies versus their respective ESG ratings. The objective is to measure the viability of ESG ratings as a way of investing by observing the trend of holding period returns versus assigned ESG ratings.

### **Terminology and Points of Clarification**

Within the thesis are terms specific to finance and require clarification. First, corporate social responsibility (CSR) is often used interchangeably with environmental social governance (ESG). Because ESG ratings are based on metrics alluding to the literal words associated with the acronym, CSR is not entirely synonymous to ESG. However,

for the sake of historical information that isn't quantitative, CSR should be treated similarly to ESG in order to utilize sources explaining the overall concept of corporate ethical consciousness. Additionally, ESG ratings are found in multiple databases and are rated based on parameters specific to each database, though they generally adopt similar criteria for rating. For this study, Sustainalytics is referenced as the primary source of ESG ratings. Sustainalytics objectively rates companies according to the three pillars of ESG (environment, social, and governance) with each having their own rating in addition to an overall rating. For the sake of assessing overall ESG performance, only the base ESG rating will be considered in any dataset. Furthermore, each rating is based on a scale of 1 to 100. Relative to ESG performance, the higher the ESG rating number, the better. In addition to ESG ratings, holding period returns are the other main metric used in the study. Holding period returns (HPR), expressed in a percentage, is the overall increase or decrease in stock price of a company over a set period. In this study, the timeframe is from January 1<sup>st</sup>, 2014 to January 1<sup>st</sup>, 2019 resulting in a holding period of 5 years. Finally, the S&P 500 is referenced as the benchmark, or baseline of performance. It is defined as an "abbreviation of Standard and Poor's 500, in the United States, a stock market index that tracks 500 publicly traded domestic companies. It is considered by many investors to be the best overall measurement of American stock market performance" (S&P 500, 2019). The S&P 500 is essentially the independent variable in the study.

### **Background**

The history of corporate social responsibility dates back to ancient Rome "seen in entities such as asylums, homes for the poor and old, hospitals and orphanages" (Latapí

Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019). Furthermore, 18<sup>th</sup> and 19<sup>th</sup> century religious groups exhibited signs of ESG/CSR with efforts to improve social welfare where the government failed to help. Social welfare problems paired with industrialization and urbanization would soon present challenges of maintaining socially conscious environments for workers. Around this time, businesses that maintained this direction of welfare for workers often associated it with religious duty rather than it being socially required. Only until the 1950's and 1960's would social responsibility become normalized within businesses' decision-making. Below is an infographic timeline of the history of corporate social responsibility which is synonymous with and shares the same historical evolution as environmental social governance.



*Figure 1. Timeline of the history of corporate social responsibility (CSR). Adapted from "A Literature Review of the History and Evolution of Corporate Social Responsibility," by M. A. Latapí Agudelo, L. Jóhannsdóttir, and B. Davídsdóttir, 2019, *International Journal of Corporate Social Responsibility*, 4(1), p. 1. Copyright 2019 by M. A. Latapí Agudelo, L. Jóhannsdóttir, and B. Davídsdóttir.*

## Literature Review

The current conversation revolving around ESG ratings and financial performance is generally speculative with little to no data supplementation. However, some research has recently been done to combat this generalization and to provide more thorough analysis of the impact ESG has on a company.

Research by Xie, Nozawa, Yagi, Fujii, & Managi on the impact of ESG and corporate efficiency has been concluded to find that a positive relationship between the two variables. With an output of revenue and inputs of cost of goods sold, net fixed assets, and number of employees, the inputs were found to be positively impacted by ESG activities and disclosures. Furthermore, the study also investigated corporate efficiency by sector to alleviate bias and to narrow the impact to be more appropriately observed. The study's data indicated that at the lower-middle disclosure level, ESG has a significant impact on corporate efficiency. Furthermore, at the lower and higher ends of the bell curve, results become negative (Xie, Nozawa, Yagi, Fujii, & Managi, 2018). This study is an effective example of ESG impacting company performance, but by different metrics than those examined in this thesis. The study fails to observe the impact of ESG outside of internal company operations whereas this thesis naturally accounts for perception. This piece of literature is supplemental to this thesis because it narrows the scope of data analysis and pieces together underlying reasons for which the data in this thesis emulates. Though the result of the literature was intended to shape future ESG disclosure policies, it also contributes to the conversation of ESG viability.

Further gravitating towards the same objective and methodology as this thesis, Yu, Guo, & Luu present research investigating firm value verses ESG disclosure scores

which was measured by ESG ratings divided by 100. Despite the similarity, the research presented draws conclusions once again geared towards policymaking. Yu, Guo, and Luu took a sample of 1,996 large cap companies and assessed their ESG ratings as metrics of transparency. The researchers used Tobin's Q to observe firm values and to weigh them against ESG disclosures. The research confirmed the positive effect of ESG disclosures on firm values. However, the observation was made regarding Tobin's Q which measures the fair value of a firm. While useful in many cases, it fails to account for how ESG disclosures are perceived rather than intrinsically valued. So, in some sense, the study eliminated bias necessary for assessing how a company is naturally valued in an information asymmetric marketplace. Furthermore, the study concludes that "firms with greater size, fewer insider holdings, a lower percentage of institutional investors, better liquidity (current ratio) and higher R&D intensity will disclose more on ESG and environmental issues" (Yu, Guo, & Luu, 2018) which seems to be an obvious observation. Firms performing better are more likely to disclose ESG, but what about those not performing well. Does the scope of ESG disclosure truly impact firm value in this example? There remain inconsistencies in how the information is presented, though natural and assumed for something of such a narrow scope.

Further research by Eccles, Ioannou, & Serafeim adds components of comparison to the discussion around ESG and market performance. Using a sample of 90 highly rated ESG companies and 90 lowly rated ESG companies, the study found polarizing performances among the two sample sets. In the 18-year time frame of the study, the higher rated companies outperformed the lower rated ones. What's interesting is that the market expectations were found to be the opposite (Eccles, Ioannou, & Serafeim, 2014).

Despite this conclusion, there is skepticism about its legitimacy since such a small sample size was chosen for each respective classifications of companies. In preliminary research on the topic, I made the same findings and from this I was prompted to compile a larger sample size irrespective of ESG rating tiers. From this a more consistent linear model is observable compared to the research offered by Eccles, Ioannou, & Serafeim.

### **Methodology**

Yahoo Finance was used to select the company stocks for the study. The site tracks company stock prices at all time intervals, of which monthly intervals were chosen for the study. The site also provides ESG ratings obtained from Sustainalytics, a reputable institute that issues ESG ratings to companies. Both stock prices as well as ESG ratings were the only numerical data obtained for the study. All further data was computed from the raw average adjusted close share prices.

In preliminary data accumulation, an issue arose with obtaining company profiles that were categorized as “OTC” or “over the counter.” Being mostly foreign companies uncommon to traditional investors, the OTC stock selections yielded inconsistent and limited data. Because of this, the search was refined to only include companies listed on the New York Stock Exchange which circumvented the issue previously faced. After narrowing the scope to the NYSE, the next search criteria added was time listed on the stock exchange. Being a 5-year analysis, only companies existing during the entire timeframe of January 1<sup>st</sup>, 2014 through January 1<sup>st</sup>, 2019 were chosen. From there, the next criteria were to examine monthly average adjusted close prices and to omit any stocks where there were abnormalities. Such abnormalities include unexplainable dips or spikes in share price that only exist in error or in stock splits or reverse splits.

Collectively, these refined criteria resulted in 498 total companies eligible for selection. Each of the 498 companies were chosen to represent the study and were categorized based on the sector they belonged to. Of which, the following sectors were represented by ESG rated companies: basic materials, communication services, consumer cyclical, consumer defensive, energy, financial services, healthcare, industrials, real estate, technology, and utilities. The full extent of company selections, their ESG ratings, and holding period returns are all tabled in Appendix A.

After selecting the companies to which the study would be done, the next step was accumulating the monthly 5-year historical average adjusted close prices for each company through Yahoo Finance. After logging the share prices in a Microsoft Excel spreadsheet, the next step was to find the monthly return percentages using the same application. This was done by taking the average adjusted close price of a month, dividing it by the previous month, and then subtracting 1 to get a percent increase or decrease. The next step was finding the excess return for each monthly percent return. This was done by subtracting the monthly treasury bill rate from the monthly returns previously calculated. Finally, the financial metrics were calculated utilizing the data accumulated and calculated. Beta was found by using the slope function of the excess return of stock verses the excess return of the S&P 500 which serves as an indicator of the overall stock market. Likewise, the intercept function was used comparing the two same sets of data to find alpha which measures risk-adjusted performance. Standard deviation, a measurement of volatility and dispersion, was found using the standard deviation function for the entire set of monthly return percentages for each stock. The average function was used on the same monthly return data to find the average monthly

return percent. Finally, the sum function was used to calculate the holding period return, or total return over the 5-years of data. This would ultimately become the most pertinent financial metric to find results and draw conclusions about the viability of ESG ratings with regards to financial performance.

The ESG ratings and their impact on holding period returns would then be represented in the form of scatter plots with trend lines to indicate positive or negative correlations between the two metrics. Additionally, a neutral horizontal line was added to indicate the performance of the S&P 500 which has no ESG rating and is treated as a passive overview of the overall market.

### Data Synthesis

The following figures show the relationship between ESG ratings verses holding period returns over the 5-year study.

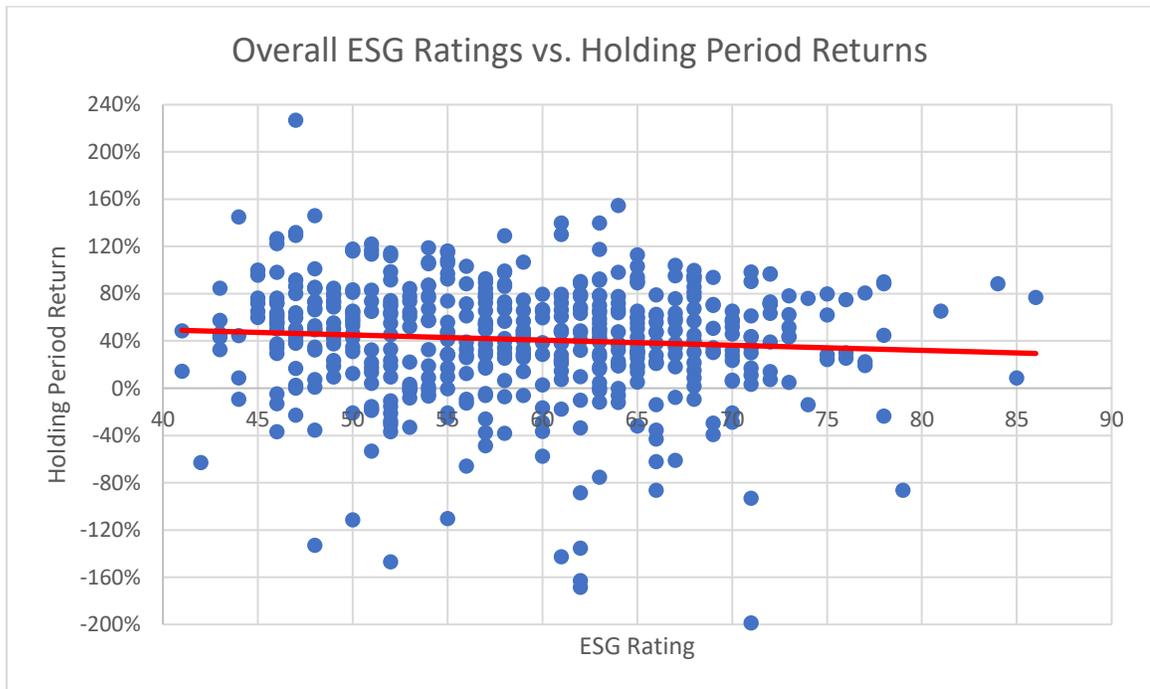


Figure 2. All 498 companies' financial performance relative to their ESG ratings.

Figure 2 shows every company used in the study and their respective ESG ratings verses their holding period returns. As an initial snapshot, the graph of the data illustrates the negative correlation between ESG ratings and holding period returns. Additionally, the lack of high-percentage holding period return outliers with high ESG ratings suggests that even in extreme cases where outliers are taken less into consideration, there are still none that represent ESG ratings as positive influencers of market performance. With that said, the figure presents unwanted bias since companies are being compared to one another across industries which behave differently for different reasons. For example, a low performing company stock in Figure 2 may be a top performer in its related sector but have weaker performance compared to the entire population of data in Figure 2. While the information shown in Figure 2 suggests ESG to not be a viable component within investing, further investigation within each sector is needed to confirm it.

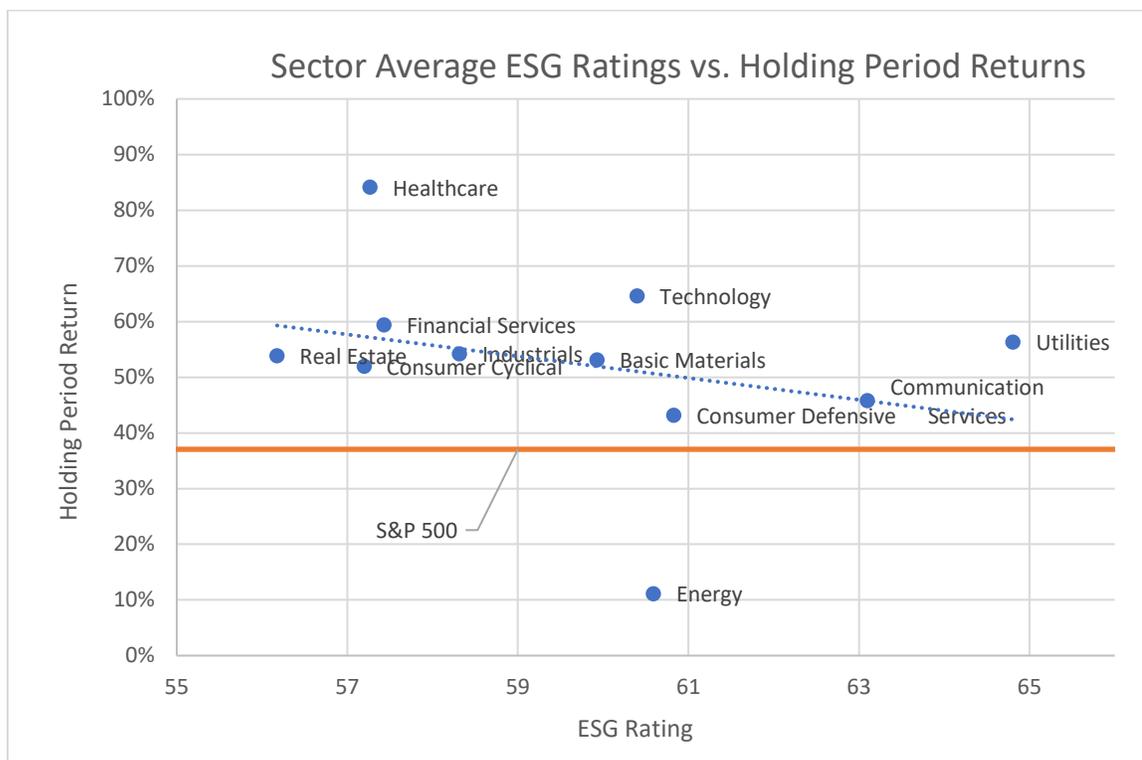
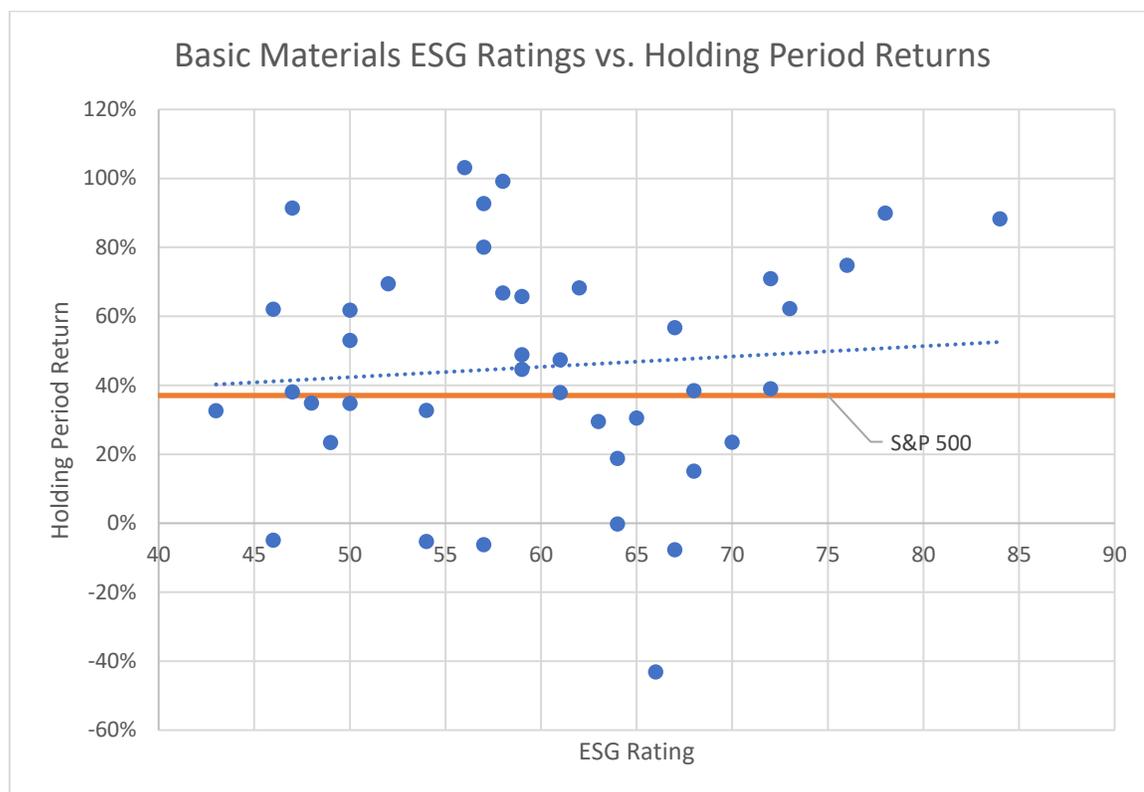


Figure 3. Sector financial performance relative to their average ESG ratings.

Overall, the sectors indicate a negative relationship between their average ESG ratings and average stock performance. This is an early indicator that ESG ratings may either negatively impact financial performance or that ESG policies and practices are not refined enough to be measurably impactful. Energy is an outlier mostly because of its saturation by oil and fuel companies, of which yield a collective low return due to falling oil prices. Uncharacteristic of what was originally presumed, the energy sector did not have the lowest average ESG ratings due to their environmentally detrimental practices. Real estate saw the lowest average ESG ratings yet maintaining an average holding period return relative to the other sectors. Utilities yielded the highest average ESG ratings while also having an average holding period return. The two polarizing sectors allude to the possibility of ESG ratings being an ineffective measurement of return at the

very least, and the trendline suggests that an inverse relationship may be present. On the contrary, sector-specific factors influencing financial performance create bias when compared to other sectors. Because of this, further analysis of each individual sector's performance relative to individual company ESG ratings is necessary to confirming the hypothesis that ESG ratings either neutrally or negatively impact stock prices.



*Figure 4.* Basic materials companies' financial performance relative to their ESG ratings.

Basic materials had an overall positive trend in ESG ratings vs financial performance. The sector had a higher average ESG rating (59.93) than the entire population used in the study (59.64). With a total holding period return of 53.13%, the sector also outperformed the S&P 500 benchmark by 16.07%. Furthermore, for the 25 companies outperforming the S&P 500, the average return was 66.02%, an

outperformance of 28.96%. The 16 underperforming company stocks yielded an average 13% return, 24.06% under the S&P 500 benchmark. Additionally, the outperforming companies had an average ESG rating of 58.81 while the underperforming companies yielded an average rating of 58. From these observations, the positive trend among ESG ratings and market performance is weakly concluded within the basic materials sector. Despite 61% of the available ESG rated companies in the sector outperforming the market, they did so with little deviation in ESG rating from those underperforming the market.

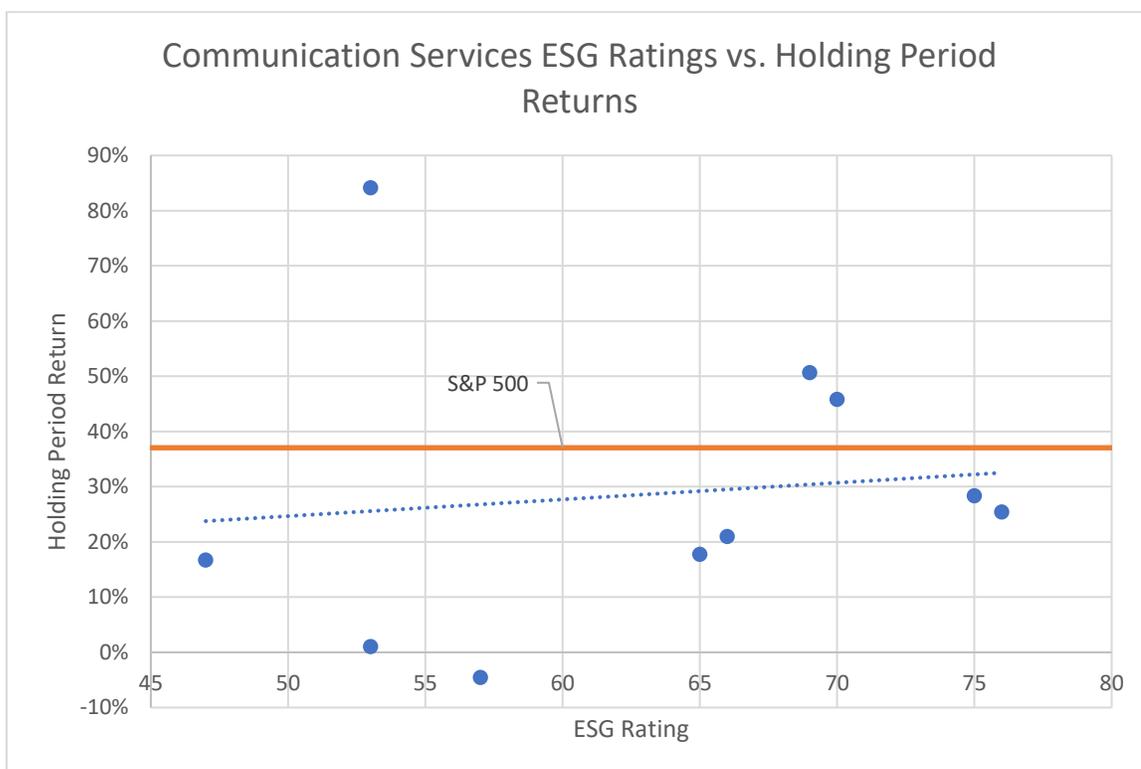
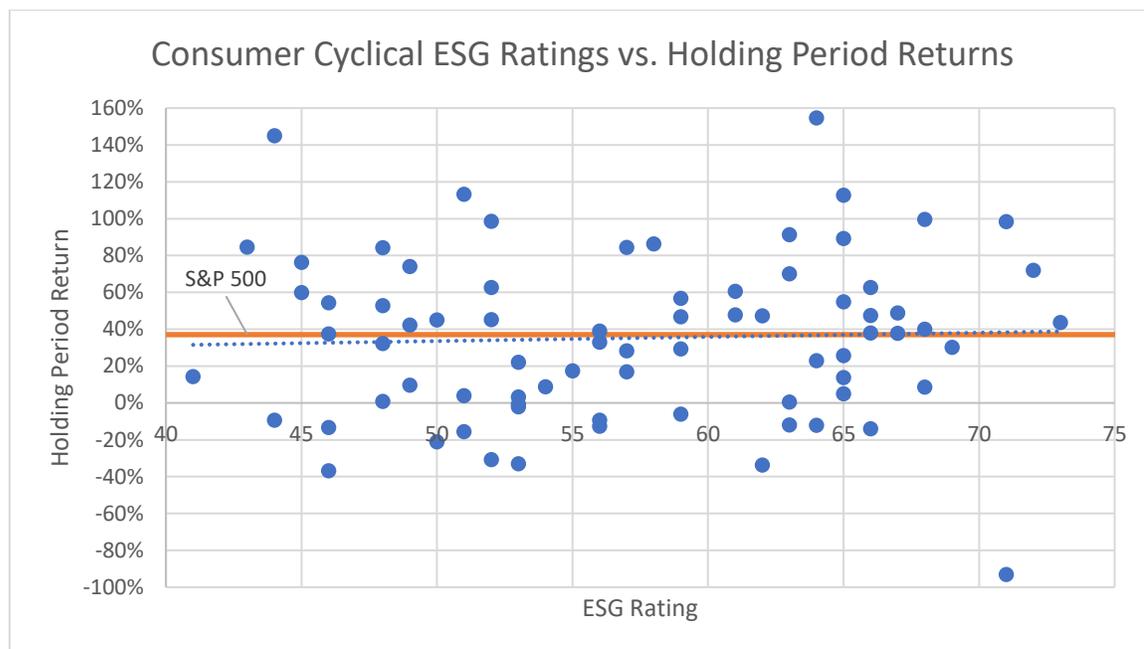


Figure 5. Communication Services companies' financial performance relative to their ESG ratings.

Of the available ESG rated companies, only 10 belonged to the communication services sector. Because of this, the sample size itself lacks integrity to be objectively

weighed. However, disregarding the lack of an adequate sample size, there exists a positive trend between ESG ratings and stock market performance. Despite 70% of the sector underperforming the market, those that did had relatively high ESG ratings.



*Figure 6.* Consumer Cyclical companies' financial performance relative to their ESG ratings.

Of the 11 sectors, consumer cyclical was the second-most populated sample. Like basic materials and communication services, consumer cyclical also experienced a positive relationship between ESG ratings and holding period returns. Though slight, the same argument and conclusion can be made similarly to basic materials: there exists a trend that isn't highly polarized results to suggest an extreme impact on holding period returns by ESG ratings. Of the 76 companies, 40 outperformed the S&P 500 benchmark by 32.28% and the other 36 underperformed the benchmark by 37.87%. Additionally, those performing above the benchmark also outperformed the entire population in the sector by 17.35%. Like the observation made in Figure 2, there are no dominant outliers

that suggest a greater threshold for market performance the higher the ESG rating gets. It is worth noting that ESG ratings above 65 cross above the benchmark. This may suggest that only at high ratings are consumer cyclical companies worth investing in based on ESG.

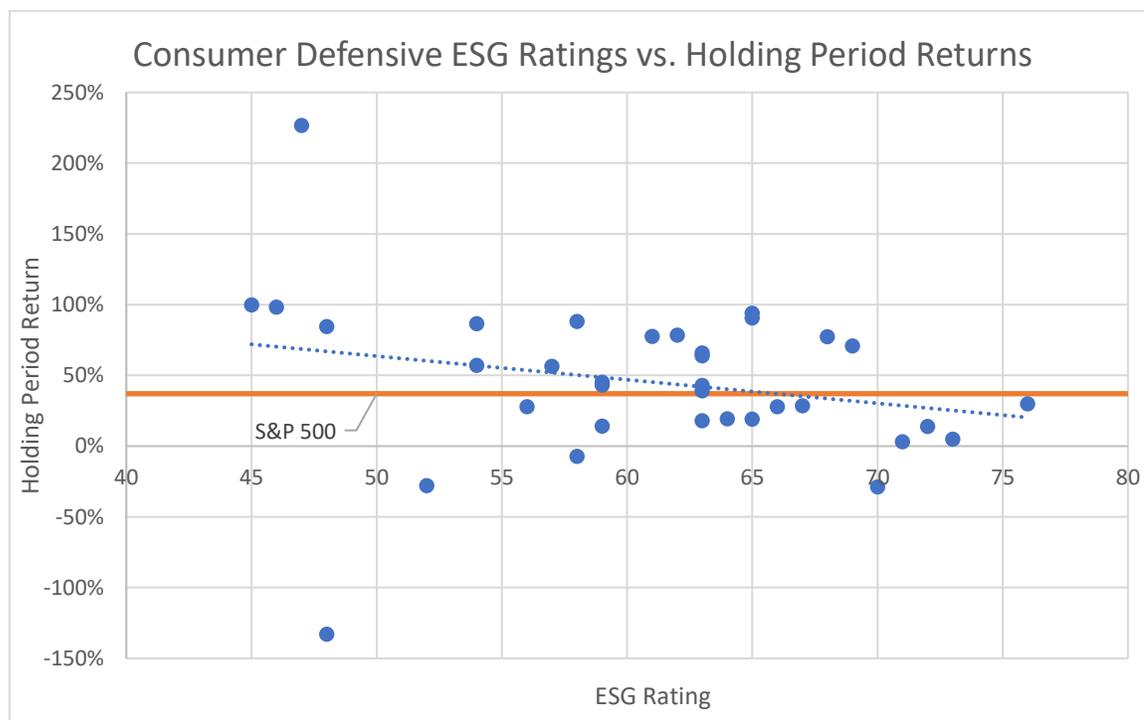


Figure 7. Consumer Defensive companies' financial performance relative to their ESG ratings.

The consumer defensive sector is the first of the negatively correlative sets of data. With a negative correlation amongst the holding period return and ESG ratings, the polarization of usefulness begins to come into play. Because the consumer defensive sector is like consumer cyclical, it is abnormal to observe such a sharp drop in market performance relative to ESG ratings. Inverse of consumer cyclical, consumer defensive companies underperform the S&P 500 at higher ESG ratings.

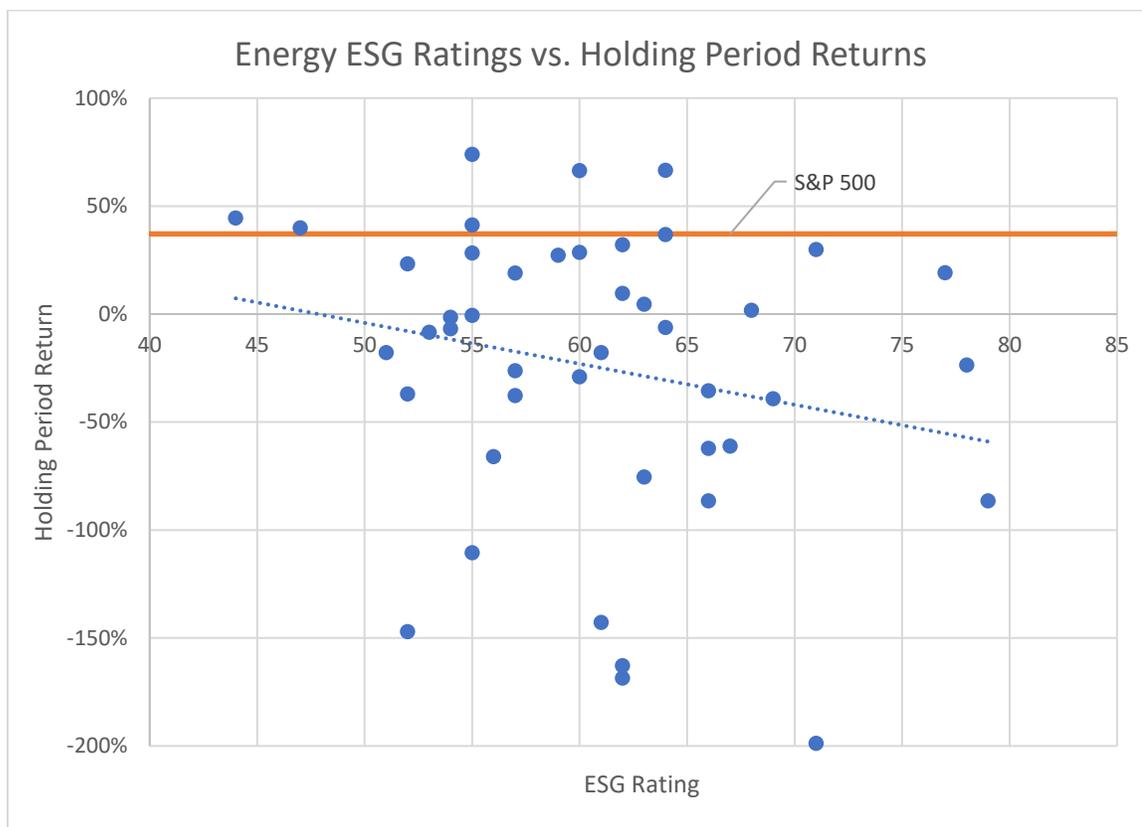


Figure 8. Energy companies' financial performance relative to their ESG ratings.

Energy companies saw a drastic decline in holding period return with the increase of ESG ratings. The entire sector experienced a massive downturn due to oil prices falling substantially over the past 5 years. Though a qualitative assumption, the likely reason for a negative holding period return to ESG correlation existing likely has to do with what the sector provides. As an oil and gas focused sector, policies to improve or reduce impact on the environment is counterintuitive to the extraction of raw materials from the earth. Likely expensive and counterproductive to mass extraction and refinery, environmental policies harm performance rather than help by a large margin. ESG ratings above 65 saw no positive return and suggest once more that positive outliers are immaterial, and in this sector, nonexistent.

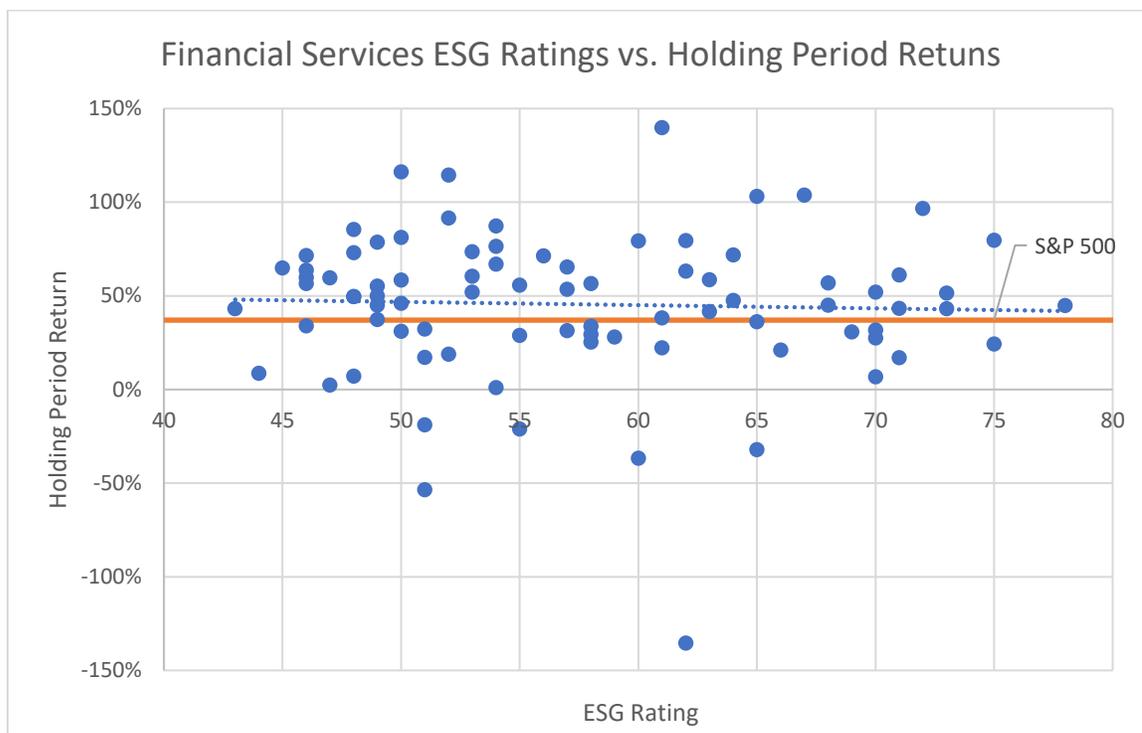


Figure 9. Financial Services companies' financial performance relative to their ESG ratings.

The financial services sector also experienced a negative trend among ESG ratings and holding period returns. Though not as evident as in the energy sector, the downward trend suggests a similar thought with respect to governance. There have been recent discoveries in banking where companies implement unethical practices to boost performance. For example, Wells Fargo was recently found to be incentivizing employees to create an unattainable amount of new accounts. Burdened with impossible quotas, employees were creating fake accounts to meet their quotas which consequently showed stakeholders growing success of the company. Due to instituting these unattainable demands, management effectively engaged in risky corporate behavior at the expense of its employees and transparency to stakeholders, a combination of unethical social and governance practices. Wells Fargo is just one example of ways financial

services companies undercut ESG-related policies and practices. Quantitatively speaking, financial services is a healthier investment at the lower end of the ESG rating spectrum. Despite there being a seemingly unnoticeable negative trend, an obvious cluster of companies outperforming the benchmark exist below an ESG rating of 60.

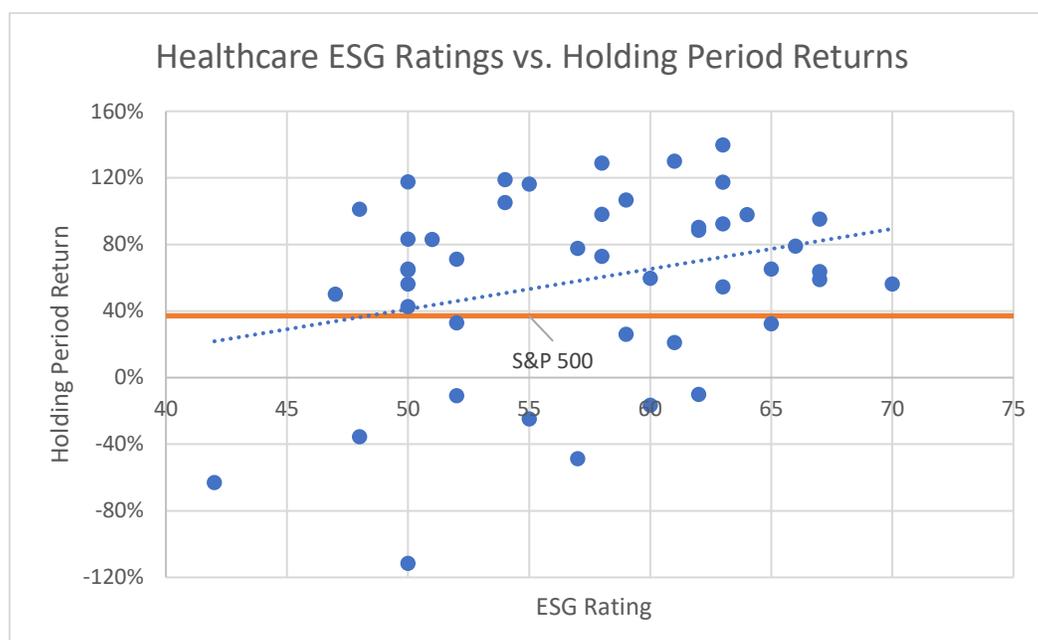
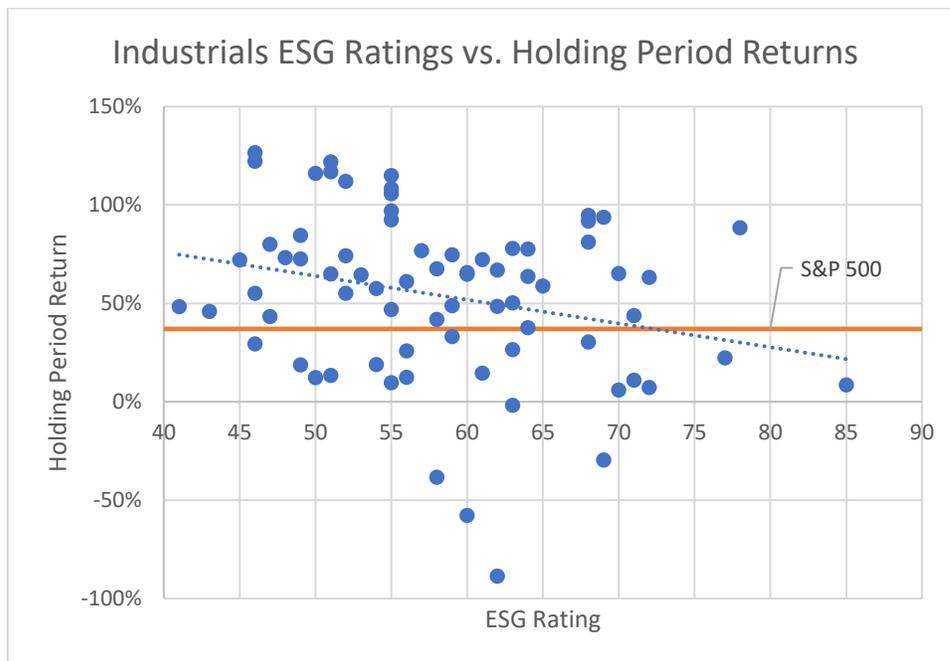


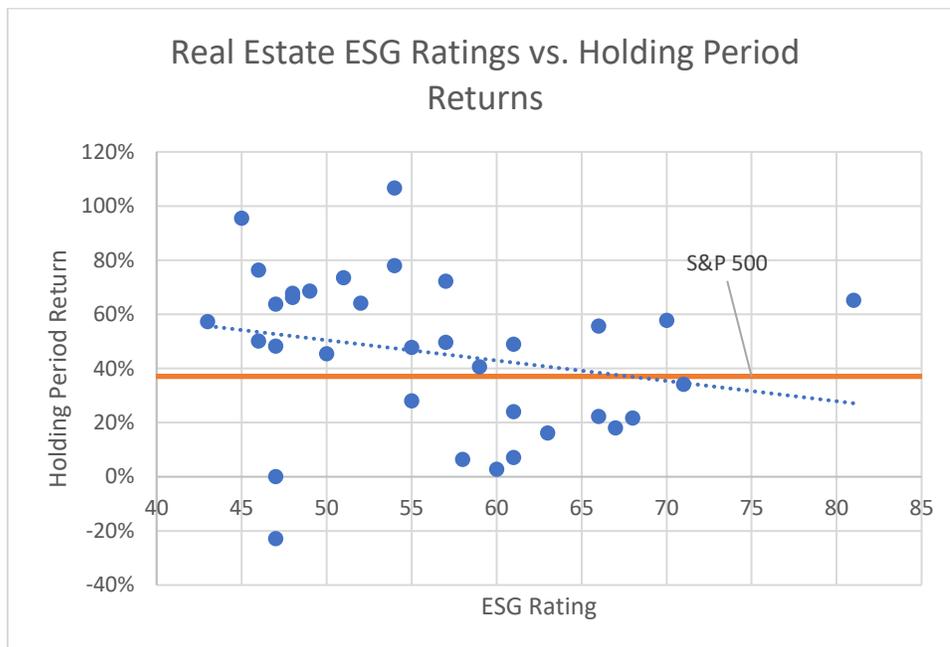
Figure 10. Healthcare companies' financial performance relative to their ESG ratings.

The healthcare sector is the first within the study to exhibit overwhelmingly positive increases in returns with the increase of ESG ratings. Likely due to growing concern over testing products on animals and overall maintaining healthy practices, the healthcare sector seems like an obvious sector where a positive trend would exist. In the event of investing specific to ESG ratings, stocks that are rated 50 and above are safe candidates to outperforming the overall market. The companies with negative holding period returns are few yet bring down the below the S&P 500. Barely above the outlier threshold, these companies can still be abnormalities.



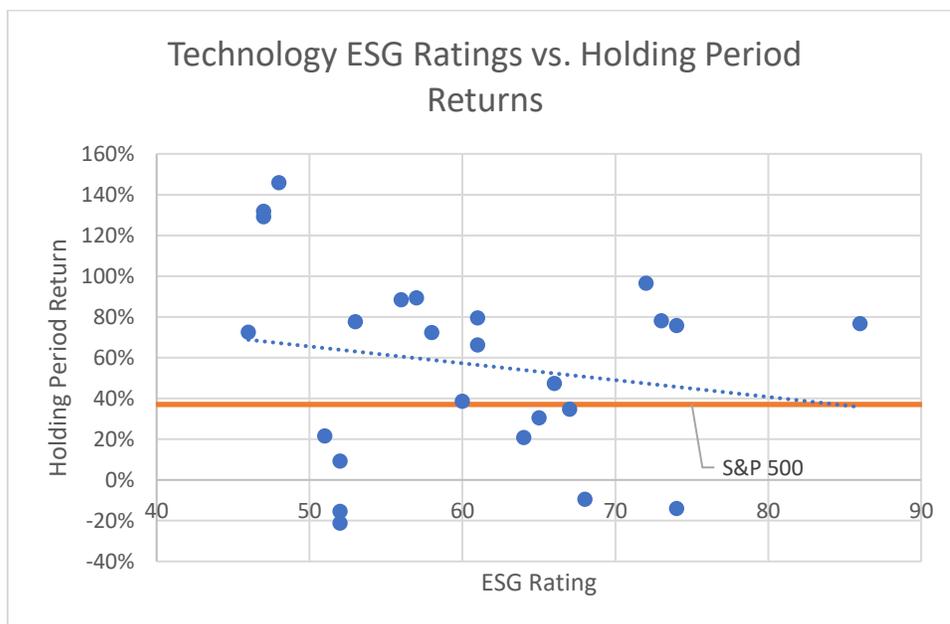
*Figure 11.* Industrials companies' financial performance relative to their ESG ratings.

Industrials, like energy, are inherently environmentally unfriendly. Production and consumption of materials among other reasons are why industrials achieve an objectively low environmental rating. Like energy, efforts to combat this rating likely result in extra cost that results in lower company performance and therefore lower stock performance. Collectively, the sector saw a negative trend among ESG ratings and holding period returns which confirms the environmental dilemma the sector faces. Converse to traditional ESG-based investing, the wiser option is to invest in lower ESG rated industrial companies because they greatly outperform their highly rated counterparts.



*Figure 12.* Real Estate companies' financial performance relative to their ESG ratings.

The real estate sector saw, once again, a negative correlation between ESG ratings and holding period returns. The real estate sector suffers from low social ratings which contribute to the large distribution of low ratings compared to high ratings. Higher ratings do not entirely suggest lower performance, but lower ratings do confirm higher performance relative to the sample size. Mid-ranging scores underperformed the market which suggests that they are the threshold for ESG ratings and market performance.



*Figure 13.* Technology companies' financial performance relative to their ESG ratings.

The technology sector was one of the few sparsely populated sample sizes. Despite this, the sector exhibited a negative relationship among ESG ratings and holding period returns. Though the sector mostly outperformed the S&P 500 benchmark, there is nothing to suggest the viability of investing based on ESG ratings. The highest achieving companies also had the lowest ratings which suggest that like the others with negative trends, ESG initiatives might be indicative of more cost and therefore worse performance.

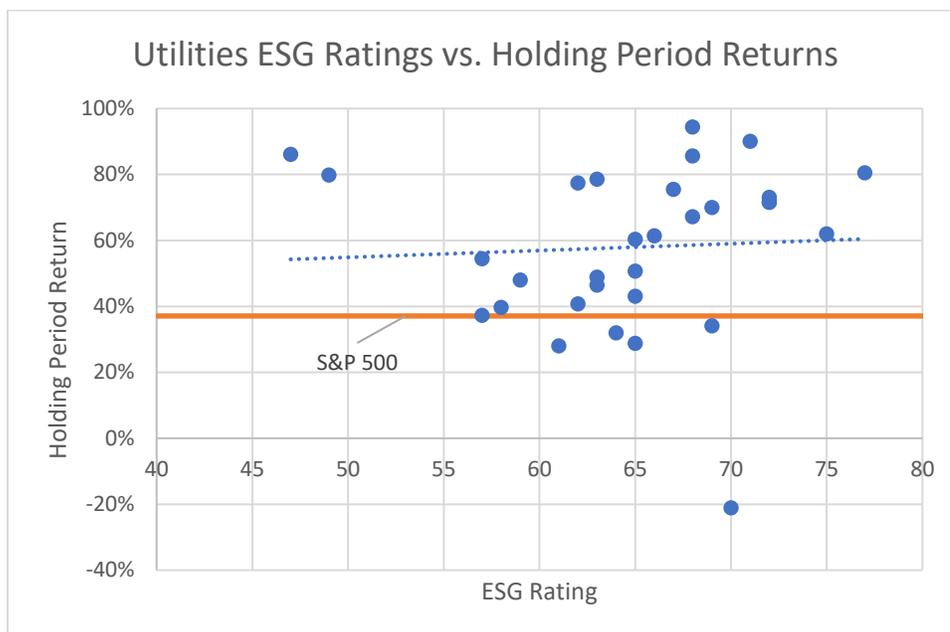


Figure 14. Utilities companies' financial performance relative to their ESG ratings.

Utilities experienced an overall positive trend in market performance relative to company ESG ratings. Abnormal when compared to the other sectors, utilities company ESG ratings were prominently highly rated and yielded returns far above the S&P 500 benchmark. This suggests that utilities companies are best suited to implement ESG policies and practices since they align with industry goals. Being providers of resources such as water, electricity, gas, sewage, or others, utilities are best provided sustainably to reduce company costs. Waste is generally minimized and therefore consciously takes into consideration the environment. The social and governance components of utilities ratings are also highly valued despite being offered limited explanation as to why. Despite most utilities companies outperforming the market, there is a clear advantage to investing in highly ESG rated companies in the sector.

## Discussion and Conclusions

Overall, company stock performance is negatively impacted by ESG ratings. When looking at specific sectors, however, the relationship between ratings and returns become more polarized. Sectors like utilities, healthcare, and basic materials see a distinct positive relationship between high ratings and high market performance. This may largely be due to the characteristics of each sector emphasizing greater regard for ESG policies unintentionally. The other possibility is that because profitability and performance are intertwined with ESG motives, these sectors are more capable and inclined to efficiently pursue ESG initiatives because they are already used to it.

On the contrary, many companies underperformed when ESG ratings increased. Relative to their own sectors, technology, real estate, industrials, energy, and consumer defensive ESG ratings indicated negative performance. Opposite of sectors positively influenced by ESG ratings, the negatively trending sectors either face financial loss when pursuing ESG initiatives or simply are incapable of correctly balancing ESG with overall company performance. Because every company with an ESG rating was included within each sector, bias among companies due to their own internal issues are minimized. Therefore, it is reasonable to conclude that these negative trends are representative of the impact ESG has on them.

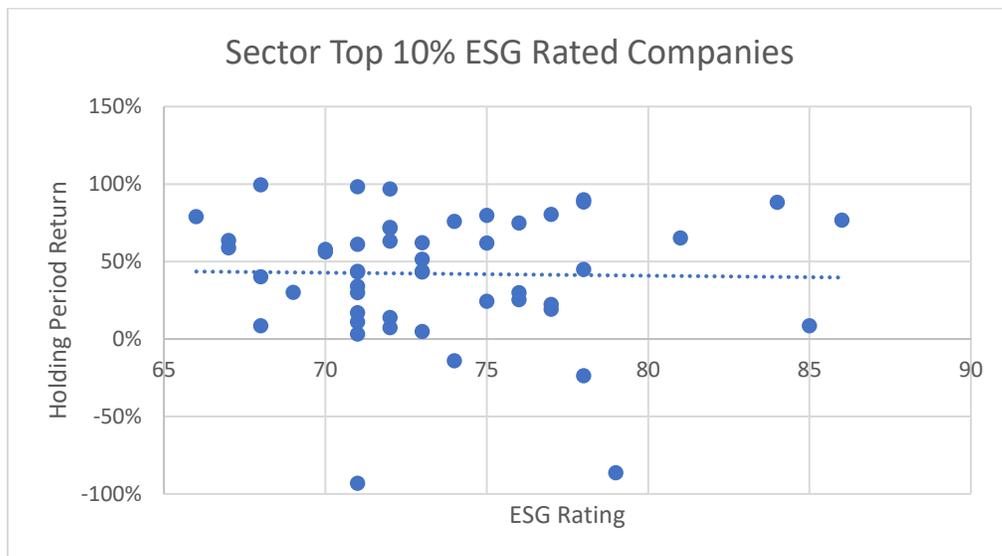


Figure 15. Top 10% ESG Rated Companies in Each Sector: ESG Ratings Verses Holding Period Returns.

Furthermore, Figure 15 suggests that even the highest ESG rated companies, when consolidated, still yield negative performance with the increase in ratings. So, despite positive correlations existing within certain sectors, ESG ratings do not allude to better market performance and even suggest poorer performance.

Inconsistent with the literature reviewed prior to the study, it appears that the market value of a company is negatively impacted by ESG ratings. However, prior research concludes the opposite based on different parameters of measurement. For the sake of reaching a conclusion in this thesis, only slightly do we find that ESG ratings adversely affect historical returns and therefore we recommend further analysis perhaps on a 10-year scale. Furthermore, because so many variables constitute company performance outside of holding period returns, it's suggested that further research also take into consideration new components of measurement.

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## Appendix A

### Company Data

The company data retrieved online exists in the following table. The company data is what supplements the charts referenced in the thesis and serve as the raw information for which conclusions are made.

Table 1 indicates companies selected for the study with their respective sectors, ticker symbols, ESG ratings, and holding period returns over the last 5 years. Based on the metrics mentioned in the methodology, 498 companies were selected. Of those selected, 31 are utilities, 25 are technology, 34 are real estate, 73 are industrials, 45 are healthcare, 84 are financial services, 44 are energy, 35 are consumer defensive, 76 are consumer cyclical, 10 are communication services, and 41 are basic materials companies.

Table 1

#### *Company Data Used in the 5-Year Financial Analysis*

Sector	Company Name	Company Ticker Symbol	ESG Score	Holding Period Return
Utilities	NextEra Energy, Inc.	NEE	68	85.59%
Utilities	Duke Energy Corporation	DUK	63	48.89%
Utilities	Dominion Energy, Inc.	D	61	28.00%
Utilities	The Southern Company	SO	57	37.24%
Utilities	Exelon Corporation	EXC	72	71.62%
Utilities	American Electric Power Company, Inc.	AEP	68	67.19%
Utilities	Sempra Energy	SRE	69	34.09%
Utilities	Public Service Enterprise Group Incorporated	PEG	69	69.99%
Utilities	Consolidated Edison, Inc.	ED	65	60.35%
Utilities	WEC Energy Group, Inc.	WEC	67	75.54%
Utilities	DTE Energy Company	DTE	72	71.58%
Utilities	Eversource Energy	ES	75	61.97%

Utilities	PPL Corporation	PPL	65	28.75%
Utilities	FirstEnergy Corp.	FE	59	47.96%
Utilities	Edison International	EIX	65	43.03%
Utilities	American Water Works Company, Inc.	AWK	68	94.37%
Utilities	Entergy Corporation	ETR	66	61.41%
Utilities	Ameren Corporation	AEE	62	77.45%
Utilities	Fortis Inc.	FTS	65	50.74%
Utilities	CMS Energy Corporation	CMS	77	80.50%
Utilities	CenterPoint Energy, Inc.	CNP	63	46.41%
Utilities	Atmos Energy Corporation	ATO	47	86.07%
Utilities	PG&E Corporation	PCG	70	-21.11%
Utilities	NRG Energy, Inc.	NRG	63	78.62%
Utilities	The AES Corporation	AES	64	31.94%
Utilities	Pinnacle West Capital Corporation	PNW	72	73.07%
Utilities	NiSource Inc.	NI	71	90.10%
Utilities	Brookfield Renewable Partners L.P.	BEP	62	40.76%
Utilities	UGI Corporation	UGI	49	79.84%
Utilities	OGE Energy Corp.	OGE	58	39.69%
Utilities	Aqua America, Inc.	WTR	57	54.45%
Technology	Oracle Corporation	ORCL	67	34.64%
Technology	salesforce.com, inc.	CRM	72	96.56%
Technology	International Business Machines Corporation	IBM	74	-14.07%
Technology	Accenture plc	ACN	74	75.83%
Technology	VMware, Inc.	VMW	61	66.23%
Technology	ServiceNow, Inc.	NOW	47	129.21%
Technology	Red Hat, Inc.	RHT	47	131.82%
Technology	TE Connectivity Ltd.	TEL	66	47.41%
Technology	HP Inc.	HPQ	86	76.76%
Technology	Twitter, Inc.	TWTR	52	-21.22%
Technology	Amphenol Corporation	APH	58	72.37%
Technology	Corning Incorporated	GLW	61	79.51%
Technology	Palo Alto Networks, Inc.	PANW	48	145.90%
Technology	Motorola Solutions, Inc.	MSI	73	78.16%
Technology	Harris Corporation	HRS	56	88.43%
Technology	CGI Inc.	GIB	53	77.68%
Technology	Gartner, Inc.	IT	46	72.46%
Technology	Leidos Holdings, Inc.	LDOS	57	89.31%
Technology	Juniper Networks, Inc.	JNPR	64	20.76%

Technology	Sensata Technologies Holding plc	ST	65	30.49%
Technology	Xerox Corporation	XRX	68	-9.50%
Technology	Arrow Electronics, Inc.	ARW	60	38.56%
Technology	Hubbell Incorporated	HUBB	52	9.31%
Technology	Acuity Brands, Inc.	AYI	51	21.63%
Technology	NCR Corporation	NCR	52	-15.41%
Real Estate	Simon Property Group, Inc.	SPG	59	40.61%
Real Estate	Crown Castle International Corp. (REIT)	CCI	48	66.24%
Real Estate	Prologis, Inc.	PLD	81	65.22%
Real Estate	Public Storage	PSA	47	48.24%
Real Estate	Equity Residential	EQR	57	49.67%
Real Estate	AvalonBay Communities, Inc.	AVB	66	55.69%
Real Estate	Digital Realty Trust, Inc.	DLR	54	106.63%
Real Estate	Boston Properties, Inc.	BXP	66	22.26%
Real Estate	Ventas, Inc.	VTR	67	18.05%
Real Estate	Realty Income Corporation	O	46	76.33%
Real Estate	Essex Property Trust, Inc.	ESS	52	64.06%
Real Estate	CBRE Group, Inc.	CBRE	70	57.81%
Real Estate	Alexandria Real Estate Equities, Inc.	ARE	57	72.17%
Real Estate	Host Hotels & Resorts, Inc.	HST	68	21.65%
Real Estate	HCP, Inc.	HCP	63	16.15%
Real Estate	Annaly Capital Management, Inc.	NLY	46	50.13%
Real Estate	Extra Space Storage Inc.	EXR	45	95.54%
Real Estate	Vornado Realty Trust	VNO	61	24.03%
Real Estate	UDR, Inc.	UDR	51	73.47%
Real Estate	W. P. Carey Inc.	WPC	50	45.45%
Real Estate	Mid-America Apartment Communities, Inc.	MAA	48	67.73%
Real Estate	Duke Realty Corporation	DRE	54	78.00%
Real Estate	Federal Realty Investment Trust	FRT	55	28.05%
Real Estate	Camden Property Trust	CPT	47	63.76%
Real Estate	VEREIT, Inc.	VER	47	-22.85%
Real Estate	Douglas Emmett, Inc.	DEI	61	48.97%
Real Estate	SL Green Realty Corp.	SLG	61	7.13%
Real Estate	Apartment Investment and Management Company	AIV	49	68.54%
Real Estate	Omega Healthcare Investors, Inc.	OHI	43	57.35%

Real Estate	Liberty Property Trust	LPT	55	47.73%
Real Estate	Kimco Realty Corporation	KIM	60	2.75%
Real Estate	Jones Lang LaSalle Incorporated	JLL	71	34.10%
Real Estate	Macerich Company	MAC	58	6.36%
Real Estate	Brixmor Property Group Inc.	BRX	47	0.10%
Industrials	The Boeing Company	BA	51	121.88%
Industrials	Honeywell International Inc.	HON	54	57.59%
Industrials	Union Pacific Corporation	UNP	58	67.48%
Industrials	United Technologies Corporation	UTX	56	12.38%
Industrials	3M Company	MMM	65	58.88%
Industrials	Lockheed Martin Corporation	LMT	64	77.63%
Industrials	United Parcel Service, Inc.	UPS	63	26.52%
Industrials	General Electric Company	GE	62	-88.70%
Industrials	Caterpillar Inc.	CAT	60	64.89%
Industrials	Canadian National Railway Company	CNI	63	50.28%
Industrials	Norfolk Southern Corporation	NSC	52	74.15%
Industrials	Deere & Company	DE	63	77.85%
Industrials	General Dynamics Corporation	GD	53	64.43%
Industrials	Illinois Tool Works Inc.	ITW	70	65.18%
Industrials	Raytheon Company	RTN	62	66.86%
Industrials	Northrop Grumman Corporation	NOC	68	91.74%
Industrials	FedEx Corporation	FDX	64	37.59%
Industrials	Waste Management, Inc.	WM	69	93.72%
Industrials	Emerson Electric Co.	EMR	61	14.57%
Industrials	Delta Air Lines, Inc.	DAL	59	74.61%
Industrials	Fidelity National Information Services, Inc.	FIS	49	84.52%
Industrials	Roper Technologies, Inc.	ROP	57	76.80%
Industrials	Johnson Controls International plc	JCI	72	7.24%
Industrials	Eaton Corporation plc	ETN	77	22.25%
Industrials	Canadian Pacific Railway Limited	CP	59	33.16%
Industrials	Southwest Airlines Co.	LUV	55	105.79%
Industrials	Ingersoll-Rand Plc	IR	72	63.18%
Industrials	Republic Services, Inc.	RSG	55	96.96%
Industrials	Cummins Inc.	CMI	68	30.33%

Industrials	TransDigm Group Incorporated	TDG	51	116.94%
Industrials	Waste Connections, Inc.	WCN	52	112.02%
Industrials	Parker-Hannifin Corporation	PH	59	48.88%
Industrials	Global Payments Inc.	GPN	46	126.54%
Industrials	Stanley Black & Decker, Inc.	SWK	64	63.72%
Industrials	FleetCor Technologies, Inc.	FLT	45	72.02%
Industrials	Rockwell Automation, Inc.	ROK	62	48.42%
Industrials	AMETEK, Inc.	AME	47	43.32%
Industrials	L3 Technologies, Inc.	LLL	51	65.02%
Industrials	W.W. Grainger, Inc.	GWW	71	43.75%
Industrials	Equifax Inc.	EFX	41	48.37%
Industrials	Xylem Inc.	XYL	78	88.41%
Industrials	CNH Industrial N.V.	CNHI	85	8.51%
Industrials	Dover Corporation	DOV	55	46.93%
Industrials	Broadridge Financial Solutions, Inc.	BR	50	115.99%
Industrials	Kansas City Southern	KSU	55	9.62%
Industrials	Textron Inc.	TXT	58	41.91%
Industrials	Wabtec Corporation	WAB	49	18.66%
Industrials	Rollins, Inc.	ROL	46	122.23%
Industrials	IDEX Corporation	IEX	49	72.53%
Industrials	United Rentals, Inc.	URI	60	65.61%
Industrials	Jacobs Engineering Group Inc.	JEC	51	13.40%
Industrials	Lennox International Inc.	LII	55	108.31%
Industrials	Allegion plc	ALLE	56	61.10%
Industrials	Snap-on Incorporated	SNA	52	55.04%
Industrials	Spirit AeroSystems Holdings, Inc.	SPR	68	94.76%
Industrials	Iron Mountain Incorporated	IRM	61	72.18%
Industrials	Avery Dennison Corporation	AVY	68	81.06%
Industrials	A. O. Smith Corporation	AOS	47	79.97%
Industrials	Nielsen Holdings plc	NLSN	69	-29.64%
Industrials	Graco Inc.	GGG	55	92.50%
Industrials	Booz Allen Hamilton Holding Corporation	BAH	55	114.93%
Industrials	Carlisle Companies Incorporated	CSL	43	45.94%
Industrials	The Toro Company	TTC	48	73.16%
Industrials	AerCap Holdings N.V.	AER	46	29.35%
Industrials	Robert Half International Inc.	RHI	46	55.17%

Industrials	Donaldson Company, Inc.	DCI	56	25.88%
Industrials	Pentair plc	PNR	63	-1.78%
Industrials	Flowsolve Corporation	FLS	58	-38.38%
Industrials	Quanta Services, Inc.	PWR	50	12.33%
Industrials	ManpowerGroup Inc.	MAN	70	5.97%
Industrials	Fluor Corporation	FLR	60	-57.73%
Industrials	AECOM	ACM	71	10.99%
Industrials	MSC Industrial Direct Co., Inc.	MSM	54	18.86%
Healthcare	Johnson & Johnson	JNJ	70	56.20%
Healthcare	Pfizer Inc.	PFE	60	59.65%
Healthcare	UnitedHealth Group Incorporated	UNH	63	139.66%
Healthcare	Merck & Co., Inc.	MRK	67	58.90%
Healthcare	Abbott Laboratories	ABT	62	88.55%
Healthcare	Medtronic plc	MDT	65	65.27%
Healthcare	AbbVie Inc.	ABBV	64	97.89%
Healthcare	Eli Lilly and Company	LLY	58	98.14%
Healthcare	Thermo Fisher Scientific Inc.	TMO	57	77.55%
Healthcare	Danaher Corporation	DHR	55	116.18%
Healthcare	Bristol-Myers Squibb Company	BMY	65	32.37%
Healthcare	CVS Health Corporation	CVS	61	21.10%
Healthcare	Stryker Corporation	SYK	51	82.96%
Healthcare	Anthem, Inc.	ANTM	61	129.96%
Healthcare	Becton, Dickinson and Company	BDX	62	90.26%
Healthcare	Cigna Corporation	CI	63	92.33%
Healthcare	Boston Scientific Corporation	BSX	59	106.73%
Healthcare	Zoetis Inc.	ZTS	50	117.64%
Healthcare	Allergan plc	AGN	62	-10.18%
Healthcare	HCA Healthcare, Inc.	HCA	54	105.19%
Healthcare	Baxter International Inc.	BAX	66	78.93%
Healthcare	Humana Inc.	HUM	58	128.89%
Healthcare	IQVIA Holdings Inc.	IQV	48	101.08%
Healthcare	Zimmer Biomet Holdings, Inc.	ZBH	59	25.92%
Healthcare	Agilent Technologies, Inc.	A	67	63.62%
Healthcare	McKesson Corporation	MCK	55	-24.88%
Healthcare	Mettler-Toledo International Inc.	MTD	67	95.13%
Healthcare	Teva Pharmaceutical Industries Limited	TEVA	57	-48.67%

Healthcare	Laboratory Corporation of America Holdings	LH	50	42.63%
Healthcare	AmerisourceBergen Corporation	ABC	52	32.94%
Healthcare	Waters Corporation	WAT	50	64.54%
Healthcare	ResMed Inc.	RMD	63	117.37%
Healthcare	The Cooper Companies, Inc.	COO	50	83.23%
Healthcare	Cardinal Health, Inc.	CAH	60	-16.65%
Healthcare	Quest Diagnostics Incorporated	DGX	50	65.28%
Healthcare	Teleflex Incorporated	TFX	54	118.88%
Healthcare	Varian Medical Systems, Inc.	VAR	63	54.59%
Healthcare	Universal Health Services, Inc.	UHS	47	50.17%
Healthcare	PerkinElmer, Inc.	PKI	52	71.22%
Healthcare	DaVita Inc.	DVA	52	-10.79%
Healthcare	Bio-Rad Laboratories, Inc.	BIO	58	72.85%
Healthcare	QIAGEN N.V.	QGEN	50	56.21%
Healthcare	Perrigo Company plc	PRGO	50	-111.58%
Healthcare	MEDNAX, Inc.	MD	48	-35.47%
Healthcare	Mallinckrodt plc	MNK	42	-63.05%
Financial Services	Berkshire Hathaway Inc.	BRK-B	45	64.96%
Financial Services	Berkshire Hathaway Inc.	BRK-A	46	63.63%
Financial Services	JPMorgan Chase & Co.	JPM	75	79.72%
Financial Services	Visa Inc.	V	65	103.18%
Financial Services	Bank of America Corporation	BAC	71	61.18%
Financial Services	Mastercard Incorporated	MA	67	103.86%
Financial Services	Wells Fargo & Company	WFC	58	25.31%
Financial Services	Citigroup Inc.	C	70	27.52%
Financial Services	Royal Bank of Canada	RY	71	43.26%
Financial Services	The Toronto-Dominion Bank	TD	78	44.81%
Financial Services	American Express Company	AXP	58	29.37%

Financial Services	U.S. Bancorp	USB	57	31.41%
Financial Services	Morgan Stanley	MS	70	51.95%
Financial Services	The Goldman Sachs Group, Inc.	GS	66	21.01%
Financial Services	BlackRock, Inc.	BLK	64	47.65%
Financial Services	The Bank of Nova Scotia	BNS	69	30.75%
Financial Services	Chubb Limited	CB	57	53.51%
Financial Services	The PNC Financial Services Group, Inc.	PNC	63	58.55%
Financial Services	The Charles Schwab Corporation	SCHW	53	73.57%
Financial Services	S&P Global Inc.	SPGI	72	96.73%
Financial Services	Bank of Montreal	BMO	73	43.23%
Financial Services	Marsh & McLennan Companies, Inc.	MMC	64	71.94%
Financial Services	The Bank of New York Mellon Corporation	BK	68	56.85%
Financial Services	Brookfield Asset Management Inc.	BAM	47	59.63%
Financial Services	Intercontinental Exchange, Inc.	ICE	54	87.24%
Financial Services	The Progressive Corporation	PGR	52	114.54%
Financial Services	The Blackstone Group L.P.	BX	43	43.14%
Financial Services	MetLife, Inc.	MET	61	22.26%
Financial Services	Capital One Financial Corporation	COF	55	28.84%
Financial Services	Aon plc	AON	56	71.38%
Financial Services	Prudential Financial, Inc.	PRU	75	24.33%
Financial Services	American International Group, Inc.	AIG	54	0.94%
Financial Services	BB&T Corporation	BBT	49	37.36%

Financial Services	Manulife Financial Corporation	MFC	70	6.72%
Financial Services	Canadian Imperial Bank of Commerce	CM	65	36.13%
Financial Services	The Travelers Companies, Inc.	TRV	58	56.57%
Financial Services	Moody's Corporation	MCO	60	79.39%
Financial Services	The Allstate Corporation	ALL	62	63.27%
Financial Services	Thomson Reuters Corporation	TRI	73	51.55%
Financial Services	SunTrust Banks, Inc.	STI	49	55.28%
Financial Services	Discover Financial Services	DFS	58	33.83%
Financial Services	State Street Corporation	STT	71	16.97%
Financial Services	Sun Life Financial Inc.	SLF	70	31.69%
Financial Services	M&T Bank Corporation	MTB	49	45.00%
Financial Services	Ameriprise Financial, Inc.	AMP	59	28.00%
Financial Services	MSCI Inc.	MSCI	61	139.81%
Financial Services	The Hartford Financial Services Group, Inc.	HIG	68	45.09%
Financial Services	Credicorp Ltd.	BAP	62	79.52%
Financial Services	Total System Services, Inc.	TSS	50	116.23%
Financial Services	KeyCorp	KEY	63	41.54%
Financial Services	First Republic Bank	FRC	52	91.53%
Financial Services	Franklin Resources, Inc.	BEN	60	-36.62%
Financial Services	Deutsche Bank Aktiengesellschaft	DB	62	-135.41%
Financial Services	Regions Financial Corporation	RF	55	55.77%
Financial Services	Loews Corporation	L	44	8.64%

Financial Services	Arthur J. Gallagher & Co.	AJG	54	66.95%
Financial Services	Markel Corporation	MKL	46	71.51%
Financial Services	Lincoln National Corporation	LNC	61	38.27%
Financial Services	Raymond James Financial, Inc.	RJF	53	60.51%
Financial Services	CNA Financial Corporation	CNA	51	32.30%
Financial Services	Ally Financial Inc.	ALLY	48	7.17%
Financial Services	Comerica Incorporated	CMA	57	65.37%
Financial Services	W. R. Berkley Corporation	WRB	50	81.15%
Financial Services	Fidelity National Financial, Inc.	FNF	48	85.44%
Financial Services	Everest Re Group, Ltd.	RE	46	56.62%
Financial Services	FactSet Research Systems Inc.	FDS	49	78.73%
Financial Services	Torchmark Corporation	TMK	49	49.96%
Financial Services	Alleghany Corporation	Y	50	58.46%
Financial Services	Reinsurance Group of America, Incorporated	RGA	54	76.40%
Financial Services	American Financial Group, Inc.	AFG	48	73.09%
Financial Services	Invesco Ltd.	IVZ	65	-32.17%
Financial Services	The Western Union Company	WU	46	33.98%
Financial Services	Alliance Data Systems Corporation	ADS	55	-20.99%
Financial Services	Unum Group	UNM	51	17.18%
Financial Services	RenaissanceRe Holdings Ltd.	RNR	48	49.54%
Financial Services	Old Republic International Corporation	ORI	46	59.75%
Financial Services	Cullen/Frost Bankers, Inc.	CFR	50	46.06%

Financial Services	Assurant, Inc.	AIZ	53	51.94%
Financial Services	Synovus Financial Corp.	SNV	48	49.56%
Financial Services	Affiliated Managers Group, Inc.	AMG	51	-53.46%
Financial Services	New York Community Bancorp, Inc.	NYCB	51	-18.87%
Financial Services	CIT Group Inc.	CIT	47	2.36%
Financial Services	AXIS Capital Holdings Limited	AXS	50	31.07%
Financial Services	Lazard Ltd	LAZ	52	18.90%
Energy	Exxon Mobil Corporation	XOM	64	-6.24%
Energy	Chevron Corporation	CVX	59	27.25%
Energy	Enbridge Inc.	ENB	62	9.57%
Energy	ConocoPhillips	COP	71	29.89%
Energy	Schlumberger Limited	SLB	67	-61.15%
Energy	EOG Resources, Inc.	EOG	60	28.63%
Energy	Suncor Energy Inc.	SU	77	19.14%
Energy	Kinder Morgan, Inc.	KMI	57	-37.73%
Energy	TransCanada Corporation	TRP	57	19.02%
Energy	Occidental Petroleum Corporation	OXY	68	1.71%
Energy	Phillips 66	PSX	55	41.23%
Energy	Marathon Petroleum Corporation	MPC	60	66.45%
Energy	Energy Transfer LP	ET	44	44.56%
Energy	Valero Energy Corporation	VLO	55	73.90%
Energy	Anadarko Petroleum Corporation	APC	57	-26.22%
Energy	Canadian Natural Resources Limited	CNQ	63	4.63%
Energy	The Williams Companies, Inc.	WMB	54	-1.53%
Energy	ONEOK, Inc.	OKE	64	36.84%
Energy	Pioneer Natural Resources Company	PXD	55	-0.61%
Energy	Halliburton Company	HAL	60	-29.06%
Energy	Concho Resources Inc.	CXO	55	28.31%
Energy	Hess Corporation	HES	78	-23.63%
Energy	Pembina Pipeline Corporation	PBA	62	32.14%

Energy	Continental Resources, Inc.	CLR	52	23.30%
Energy	Marathon Oil Corporation	MRO	61	-17.77%
Energy	Devon Energy Corporation	DVN	69	-39.24%
Energy	Noble Energy, Inc.	NBL	66	-86.49%
Energy	Apache Corporation	APA	66	-62.15%
Energy	Cenovus Energy Inc.	CVE	79	-86.42%
Energy	Cabot Oil & Gas Corporation	COG	52	-36.96%
Energy	Encana Corporation	ECA	66	-35.58%
Energy	National Oilwell Varco, Inc.	NOV	56	-65.97%
Energy	Targa Resources Corp.	TRGP	54	-6.73%
Energy	HollyFrontier Corporation	HFC	64	66.62%
Energy	Cimarex Energy Co.	XEC	51	-17.88%
Energy	Helmerich & Payne, Inc.	HP	53	-8.35%
Energy	WPX Energy, Inc.	WPX	47	39.97%
Energy	EQT Corporation	EQT	63	-75.46%
Energy	Transocean Ltd.	RIG	55	-110.52%
Energy	Chesapeake Energy Corporation	CHK	61	-142.75%
Energy	Antero Resources Corporation	AR	52	-147.02%
Energy	Range Resources Corporation	RRC	62	-168.55%
Energy	Crescent Point Energy Corp.	CPG	62	-162.87%
Energy	Weatherford International plc	WFT	71	-198.81%
Consumer Defensive	Walmart Inc.	WMT	59	43.12%
Consumer Defensive	The Procter & Gamble Company	PG	63	39.08%
Consumer Defensive	The Coca-Cola Company	KO	63	42.93%
Consumer Defensive	Philip Morris International Inc.	PM	64	19.19%
Consumer Defensive	Coca-Cola FEMSA, S.A.B. de C.V.	KOF	70	-28.88%
Consumer Defensive	Altria Group, Inc.	MO	63	63.73%
Consumer Defensive	The Estée Lauder Companies Inc.	EL	62	78.42%
Consumer Defensive	Colgate-Palmolive Company	CL	72	13.92%
Consumer Defensive	Kimberly-Clark Corporation	KMB	76	29.90%

Consumer Defensive	Constellation Brands, Inc.	STZ	54	86.62%
Consumer Defensive	Target Corporation	TGT	59	45.20%
Consumer Defensive	Sysco Corporation	SYY	61	77.50%
Consumer Defensive	Dollar General Corporation	DG	48	84.60%
Consumer Defensive	General Mills, Inc.	GIS	71	3.20%
Consumer Defensive	Tyson Foods, Inc.	TSN	54	57.06%
Consumer Defensive	The Hershey Company	HSY	66	27.78%
Consumer Defensive	Archer-Daniels-Midland Company	ADM	56	27.82%
Consumer Defensive	Brown-Forman Corporation	BF-B	63	65.77%
Consumer Defensive	TAL Education Group	TAL	47	226.65%
Consumer Defensive	Hormel Foods Corporation	HRL	58	88.00%
Consumer Defensive	The Kroger Co.	KR	69	70.87%
Consumer Defensive	Kellogg Company	K	65	19.04%
Consumer Defensive	McCormick & Company, Incorporated	MKC	65	93.91%
Consumer Defensive	The Clorox Company	CLX	68	77.19%
Consumer Defensive	Church & Dwight Co., Inc.	CHD	65	90.51%
Consumer Defensive	New Oriental Education & Technology Group Inc.	EDU	45	99.86%
Consumer Defensive	Conagra Brands, Inc.	CAG	59	14.12%
Consumer Defensive	The J. M. Smucker Company	SJM	63	17.88%
Consumer Defensive	Molson Coors Brewing Company	TAP	67	28.60%
Consumer Defensive	Campbell Soup Company	CPB	73	4.89%
Consumer Defensive	Coty Inc.	COTY	52	-27.98%

Consumer Defensive	Herbalife Nutrition Ltd.	HLF	46	98.13%
Consumer Defensive	Bunge Limited	BG	58	-7.33%
Consumer Defensive	Ingredion Incorporated	INGR	57	56.31%
Consumer Defensive	Rite Aid Corporation	RAD	48	-132.96%
Consumer Cyclical	The Walt Disney Company	DIS	65	54.89%
Consumer Cyclical	The Home Depot, Inc.	HD	68	99.55%
Consumer Cyclical	McDonald's Corporation	MCD	57	84.30%
Consumer Cyclical	NIKE, Inc.	NKE	65	89.27%
Consumer Cyclical	Lowe's Companies, Inc.	LOW	63	91.25%
Consumer Cyclical	General Motors Company	GM	65	25.62%
Consumer Cyclical	Las Vegas Sands Corp.	LVS	65	4.99%
Consumer Cyclical	Ford Motor Company	F	62	-33.68%
Consumer Cyclical	Carnival Corporation	CCL	61	47.84%
Consumer Cyclical	V.F. Corporation	VFC	68	40.08%
Consumer Cyclical	YUM! Brands, Inc.	YUM	58	86.22%
Consumer Cyclical	AutoZone, Inc.	AZO	52	62.57%
Consumer Cyclical	Hilton Worldwide Holdings Inc.	HLT	66	62.55%
Consumer Cyclical	Royal Caribbean Cruises Ltd.	RCL	71	98.33%
Consumer Cyclical	Fiat Chrysler Automobiles N.V.	FCAU	64	154.69%
Consumer Cyclical	Aptiv PLC	APTV	73	43.61%
Consumer Cyclical	Best Buy Co., Inc.	BBY	65	112.71%
Consumer Cyclical	CBS Corporation	CBS	44	-9.38%

Consumer Cyclical	Chipotle Mexican Grill, Inc.	CMG	53	-0.76%
Consumer Cyclical	International Paper Company	IP	65	13.74%
Consumer Cyclical	Magna International Inc.	MGA	67	37.84%
Consumer Cyclical	Omnicom Group Inc.	OMC	53	22.12%
Consumer Cyclical	D.R. Horton, Inc.	DHI	45	59.82%
Consumer Cyclical	Lennar Corporation	LEN	41	14.21%
Consumer Cyclical	Genuine Parts Company	GPC	46	37.40%
Consumer Cyclical	Darden Restaurants, Inc.	DRI	51	113.25%
Consumer Cyclical	MGM Resorts International	MGM	55	17.30%
Consumer Cyclical	Tiffany & Co.	TIF	57	28.28%
Consumer Cyclical	CarMax, Inc.	KMX	48	52.86%
Consumer Cyclical	Norwegian Cruise Line Holdings Ltd.	NCLH	52	45.16%
Consumer Cyclical	Advance Auto Parts, Inc.	AAP	46	54.31%
Consumer Cyclical	Kohl's Corporation	KSS	63	70.03%
Consumer Cyclical	NVR, Inc.	NVR	43	84.48%
Consumer Cyclical	Domino's Pizza, Inc.	DPZ	44	144.99%
Consumer Cyclical	Ralph Lauren Corporation	RL	56	-12.69%
Consumer Cyclical	The Gap, Inc.	GPS	68	8.56%
Consumer Cyclical	Mohawk Industries, Inc.	MHK	53	-2.19%
Consumer Cyclical	Under Armour, Inc.	UAA	56	-9.30%
Consumer Cyclical	PVH Corp.	PVH	59	-6.18%
Consumer Cyclical	Packaging Corporation of America	PKG	59	56.77%

Consumer Cyclical	Lear Corporation	LEA	72	71.92%
Consumer Cyclical	The Interpublic Group of Companies, Inc.	IPG	59	46.65%
Consumer Cyclical	Whirlpool Corporation	WHR	54	8.81%
Consumer Cyclical	PulteGroup, Inc.	PHM	50	45.06%
Consumer Cyclical	BorgWarner Inc.	BWA	66	-14.01%
Consumer Cyclical	Hyatt Hotels Corporation	H	62	47.21%
Consumer Cyclical	Crown Holdings, Inc.	CCK	57	16.87%
Consumer Cyclical	Gildan Activewear Inc.	GIL	69	30.19%
Consumer Cyclical	Aramark	ARMK	56	32.98%
Consumer Cyclical	Service Corporation International	SCI	52	98.46%
Consumer Cyclical	KAR Auction Services, Inc.	KAR	45	76.30%
Consumer Cyclical	Fortune Brands Home & Security, Inc.	FBHS	48	0.85%
Consumer Cyclical	Sealed Air Corporation	SEE	59	29.29%
Consumer Cyclical	Macy's, Inc.	M	64	-12.12%
Consumer Cyclical	L Brands, Inc.	LB	63	-11.89%
Consumer Cyclical	Autoliv, Inc.	ALV	66	37.99%
Consumer Cyclical	WABCO Holdings Inc.	WBC	56	39.01%
Consumer Cyclical	Capri Holdings Limited	CPRI	46	-36.86%
Consumer Cyclical	Hanesbrands Inc.	HBI	63	0.39%
Consumer Cyclical	Foot Locker, Inc.	FL	49	74.00%
Consumer Cyclical	Nordstrom, Inc.	JWN	64	22.88%
Consumer Cyclical	Sonoco Products Company	SON	67	48.82%

Consumer Cyclical	Polaris Industries Inc.	PII	51	-15.67%
Consumer Cyclical	Harley-Davidson, Inc.	HOG	52	-30.75%
Consumer Cyclical	Vipshop Holdings Limited	VIPS	53	3.30%
Consumer Cyclical	Toll Brothers, Inc.	TOL	51	3.98%
Consumer Cyclical	Leggett & Platt, Incorporated	LEG	49	42.17%
Consumer Cyclical	Six Flags Entertainment Corporation	SIX	48	84.19%
Consumer Cyclical	Wyndham Destinations, Inc.	WYND	66	47.37%
Consumer Cyclical	Thor Industries, Inc.	THO	48	32.30%
Consumer Cyclical	Dick's Sporting Goods, Inc.	DKS	50	-21.08%
Consumer Cyclical	TEGNA Inc.	TGNA	49	9.53%
Consumer Cyclical	Spectrum Brands Holdings, Inc.	SPB	46	-13.27%
Consumer Cyclical	International Game Technology PLC	IGT	61	60.52%
Consumer Cyclical	Delphi Technologies PLC	DLPH	71	-93.07%
Consumer Cyclical	Signet Jewelers Limited	SIG	53	-33.00%
Communicati on Services	Verizon Communications Inc.	VZ	70	45.81%
Communicati on Services	AT&T Inc.	T	65	17.77%
Communicati on Services	American Tower Corporation (REIT)	AMT	53	84.16%
Communicati on Services	BCE Inc.	BCE	75	28.32%
Communicati on Services	Rogers Communications Inc.	RCI	69	50.63%
Communicati on Services	Sprint Corporation	S	66	20.97%
Communicati on Services	TELUS Corporation	TU	76	25.41%
Communicati on Services	CenturyLink, Inc.	CTL	53	1.01%

Communication Services	Shaw Communications Inc.	SJR	47	16.72%
Communication Services	Public Joint-Stock Company Mobile TeleSystems	MBT	57	-4.55%
Basic Materials	DowDuPont Inc.	DWDP	58	99.16%
Basic Materials	Ecolab Inc.	ECL	59	48.82%
Basic Materials	Air Products and Chemicals, Inc.	APD	72	70.95%
Basic Materials	The Sherwin-Williams Company	SHW	57	92.68%
Basic Materials	LyondellBasell Industries N.V.	LYB	61	37.89%
Basic Materials	Southern Copper Corporation	SCCO	54	32.68%
Basic Materials	PPG Industries, Inc.	PPG	63	29.44%
Basic Materials	Newmont Goldcorp Corporation	NEM	78	89.90%
Basic Materials	Barrick Gold Corporation	GOLD	70	23.48%
Basic Materials	Weyerhaeuser Company	WY	64	-0.24%
Basic Materials	Nucor Corporation	NUE	50	34.77%
Basic Materials	Freeport-McMoRan Inc.	FCX	67	-7.68%
Basic Materials	Vulcan Materials Company	VMC	50	61.75%
Basic Materials	International Flavors & Fragrances Inc.	IFF	73	62.22%
Basic Materials	Martin Marietta Materials, Inc.	MLM	52	69.41%
Basic Materials	Celanese Corporation	CE	57	80.06%
Basic Materials	Franco-Nevada Corporation	FNV	62	68.25%
Basic Materials	Teck Resources Limited	TECK	84	88.29%
Basic Materials	Masco Corporation	MAS	59	65.74%
Basic Materials	Eastman Chemical Company	EMN	68	15.05%

Basic Materials	FMC Corporation	FMC	65	30.46%
Basic Materials	The Mosaic Company	MOS	57	-6.20%
Basic Materials	CF Industries Holdings, Inc.	CF	50	53.02%
Basic Materials	Agnico Eagle Mines Limited	AEM	76	74.79%
Basic Materials	Wheaton Precious Metals Corp.	WPM	67	56.69%
Basic Materials	Sociedad Química y Minera de Chile S.A.	SQM	56	103.15%
Basic Materials	Westlake Chemical Corporation	WLK	47	38.10%
Basic Materials	Albemarle Corporation	ALB	61	47.42%
Basic Materials	RPM International Inc.	RPM	46	62.07%
Basic Materials	Israel Chemicals Ltd.	ICL	64	18.74%
Basic Materials	Reliance Steel & Aluminum Co.	RS	49	23.43%
Basic Materials	Owens Corning	OC	72	38.97%
Basic Materials	MDU Resources Group, Inc.	MDU	54	-5.29%
Basic Materials	The Scotts Miracle-Gro Company	SMG	43	32.64%
Basic Materials	Huntsman Corporation	HUN	59	44.64%
Basic Materials	Alcoa Corporation	AA	68	38.44%
Basic Materials	Ashland Global Holdings Inc.	ASH	58	66.77%
Basic Materials	NewMarket Corporation	NEU	48	34.80%
Basic Materials	Eagle Materials Inc.	EXP	46	-4.90%
Basic Materials	Turquoise Hill Resources Ltd.	TRQ	66	-43.13%
Basic Materials	United States Steel Corporation	X	47	91.43%

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