

THE PERFORMANCE OF SOCIALLY RESPONSIBLE INVESTMENT FUNDS

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Abstract

Socially Responsible Investment (SRI) has been a growingly important topic in the investment community over the past two decades. However, studies have come up with mixed results as to whether this is a viable investment approach for all, or investors need to forego their return aspirations if they want exposure to “social dividends”. Our study is modeled from one of the most prominent work done in the field by Meir Statman who published his paper “Socially Responsible Mutual Funds” in 2000, exploring the performance of SRI mutual funds and measuring them by four attributes. We extend his approach to a set of actively managed SRI funds in the last decade (Q3 2010 – Q3 2019) and change the frequency of data into quarterly from monthly, adding two more benchmarks to get a new perspective on diversification. Our findings conclude that SRI investments, in fact, add value when the investment approach is passive and well-diversified.

Keywords: Socially Responsible Investment, SRI, ESG, Mutual Funds, Active Management, Passive Investment, Diversification.

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Introduction

According to The Forum for Sustainable and Responsible Investment (SIF), Socially Responsible Investment (SRI) is an investment practice incorporating environment, social and governance (ESG) criteria to generate competitive financial returns as well as positive societal impacts. In addition to the major goal of general investment – financial gain, SRI also offers investors the opportunity to create social impacts. Although Socially Responsible Investment (SRI) events scattered during the 60's – 70's period, it was not until the 1980s that many investors and mutual funds expressed concerns regarding 'impact investment'. Since its origination, SRI has evolved rapidly and become an inclusive tool in securities selection. Accordingly, investors would choose stocks based on not only their performances but also their ranks among industry peers in terms of ESG criteria including environmental friendliness, labor relations, and board independency, etc.

The Report on US Sustainable, Responsible and Impact Investing Trends 2018 by SIF emphasizes the explosion of SRI over time. Accordingly, these assets value have increased more than 18-fold since 1995, reaching nearly 12 trillion dollars and making SRI one out of four professionally managed money in the US (The Forum for Sustainable and Responsible Investment, 2018). In Canada, by the end of 2017, 2.13 trillion dollars of SRI under management, accounting for 41.6% growth from 2015 (Responsible Investment Association, 2018). Due to this investment trend, the topic of SRI funds' performance has been discussed by many authors, most of them wondering whether the inclusion of ESG criteria in investing hurts investment returns. Hence, the core value of their researches is the comparison between SRI funds and conventional funds' investment returns. If SRI funds generate lower investment returns, it is evident that 'impact investing' undermines

financial returns. Conversely, as SRI funds outperform conventional funds, SRI investment should be one of the mainstream investing avenues. Otherwise, if there is no difference between those two's returns, investors are free to choose their investment strategy. Opponents of SRI assume that ESG inclusion investment will diminish general returns because of limited investment opportunities, especially in the context of Modern Portfolio Theory. Despite admitting the disadvantage of quantities reduction, the proponents support their points of view by mentioning that ESG integration would provide long-term meaningful benefits for the community (RBC Global Asset Management, 2019). Most of the research on this topic has agreed that there is no significant difference between SRI funds and conventional funds return.

In terms of strategy, social, responsible investing provides investors with many different strategies to screen out companies such as negative, positive or thematic screening, etc. Negative screening, which focuses on the exclusion of companies with low ESG scorecards has been an oriented approach in the US market while positive screening is preferred in the European market (RBC Global Asset Management, 2019). On the other hand, SRI assets in Canada are managed following different strategies including ESG integration, shareholder engagement, norm-based screening and negative screening (Responsible Investment Association, 2018).

In this paper, we examine the performance of SRI funds and compare it with S&P500's and MSCI KLD400's in a 10-year period, from the third quarter of 2010 to the third quarter in 2019. First, we calculate the Jensen's alphas of funds over time to see whether SRI funds generate excess return. We also take into consideration the "excess standard-deviation-adjusted return" – eSDAR. In order to make more significant comparison, our funds dataset

will be evaluated in both US and Canadian markets. In US market, we choose the MSCI KLD 400 Social Index as the benchmark. The MSCI KLD 400 Social Index is a capital weighted index of 400 US securities which comprises companies with superior ESG rating and eliminates those with negative social or environmental influences. In addition, we use the S&P 500 as the largest universe of securities for comparison. In Canadian market, JANTZI Social Index – JSI and S&P/TSX 60 are selected as the benchmarks. Our paper aims to explore the performance of SRI investments in the last 10 years by examining the fund’s quarterly return and volatility.

Our paper is organized in the following structure:

- Section 1: Research Objective – We talk about our research objectives in a concise manner, where we address the questions this paper aims to answer.
- Section 2: Introduction of Socially Responsible Investment – We briefly introduce SRI, its performance in recent years in North America. We also look into how this philosophy of investment emerged and became so important over time.
- Section 3: Literature Review – We explore the academic work done on this topic area, how different school of thoughts have evolved regarding socially responsible investing over the years.
- Section 4: Data and Methodology – We revisit the process of collecting data regarding SRI funds in North America. Also, we provide a brief overview of the main aspects of what we looked for when collecting data. We also discuss the different indexes we chose and the rationale behind it. Finally, we focus on the used models, variables and the testing procedure in detail.

- Section 5: Discussion of our findings – We provide a detailed analysis of the takeaways from running the data through the measures we selected. We make a comparative analysis as well as a discussion on the significance of our results.
- Section 6: Conclusion and Suggestions for Future Research – We summarize taking the entire process into perspective and linking our studies to the ones we modelled it on. And we also explore what potential areas could make for interesting avenues for future research.

Research Objective

Our research is aimed at addressing the following two aspects of the Socially Responsible Investment attributes:

- Does SRI funds perform better than conventional investments?
- If an investor were to invest with exposure to SRI, what would be the best approach to generate the optimal portfolio?

We explore the possible answers to these questions using the Statman (Statman, 2000) established approach, with our own set of modifications applied to it as we discuss them in our methodology section.

Background of socially responsible investment

Socially Responsible Investment emerged out of the tensed political backdrop of the 1960s, where many of the social practices came under the microscope — a prolonged and infamous war in Vietnam, a challenging movement with civil rights, harming the environment, and inequality that women had to struggle through — all of it came together

to form a strong locomotive of public awareness. This rise of conscience picked up steam in the following two decades, fueled by unprecedented human caused disasters in the forms of Chernobyl and Exxon Valdez, combined with the trend of anti-apartheid activism. With the changing times, companies soon followed to pick up on the notion that health of the people and the planet are very much intertwined with the long-term value of the business itself. Along with the companies, the investors also grew conscious of the perspective of looking at companies from both the viewpoints of financial and social returns. At the beginning of 1970s, when the Vietnam war has become more complicated, many investors showed their concerns in terms of avoiding “war profiteering” in their portfolios.

Subsequently, in 1971, the Pax World Balanced Fund was launched allowing SRI investor to limit their direct investment to Agent Orange. As more society related protests occurred during this time along with raising concerns among religious investors, more funds similar to Pax were launched. The later formed funds provided investors with a better investment framework well as incorporated more updated SRI techniques. This has built up a solid foundation for SRI development, making SRI an explosive investment trend.

A trend that exhibits, the ranks of responsible investors and forward-thinking companies increase every year, reflected also in the increase of the SRI assets under management. As per the last reported numbers in 2018, SRI assets add up to a staggering \$12 trillion, or 25% of U.S. assets under management, with a 38% increase just since 2016 (The SRI Conference and Community, 2018).

Table A: Evolution of SRI AUM in US

Year	US SRI AUM (\$b)
1995	639
1997	1185
1999	2159
2005	2290
2018	12000

(Renneboog, Horst, & Zhang, 2008)

Literature Review

There have been a significant body of work established in whether SRI is a legitimate approach to investment from a value addition perspective. However, all these results came up with mixed outcomes on both sides of the fence. One of the most cited authors on the topic, Meir Statman (Statman, 2000) found that the Domini Social Index (DSI), arguably the most widely used index of socially responsible stocks, did better than S&P 500 over the course of 1990-1998. However, his study also concluded that in terms of Mutual Funds, the performance trailed S&P 500 returns. Another prominent study done before that, by Hamilton et al (Hamilton, Jo, & Statman, 1993), also validate the assumption that Socially Responsible Investing Mutual Funds do not generate a statistically significant excess return over conventional Mutual Funds. Their studies looked into the 10-year period of 1981-1990.

Studies in the next decade at the beginning of 2000s have continued the trend of finding mixed results in SRI funds' performance. A study into Canadian SRI mutual funds showed that the fund might not have gained more returns, but it may be argued that it has less of a

risk exposure compared to the market – according to Foerster & Asmundson (Foerster & Asmundson, 2001). Their study results contend that funds engaged are not performing any differently in terms of financial returns. But their key takeaway is, these SRI screenings impact the risk exposure of these funds, which make a value-adding argument in favor of SRI investment philosophy. Taking the set of funds in the period of 1990–2001, a study done by Bauer et al (Bauer, Koedijk, & Otten, 2005) suggests that after controlling for investment style, there was no evidence of significant differences in risk-adjusted returns between SRI funds and conventional funds. They also found that SRI funds typically had a lagging period before they caught up to the returns. Geczy et al (Geczy, Stambaugh, & Levin, 2005), contend that the cost of putting the entire fund on the SRI constraint is quite high on the investors' end and found that maybe a portion of the funds could thus be considered for such purposes – this cost is theoretically explained by the added diversification costs, given the constrained investors have to go an extra mile to optimally balance their portfolios' exposures.

Renneboog et al (Renneboog, Horst, & Zhang, 2008), were critical about the approach to studies in SRI field. They argued that the existing studies fail to capture whether investors are willing to accept suboptimal financial performance to pursue social or ethical objectives. They also put forth the notion that the growing significance of SRI might challenge some of the established school of thoughts with respect to corporate finance, asset pricing, and financial intermediation. A study by Owen & Qian (Owen & Qian, 2008), further validates the point, as they suggest that non-financial aspects also factor in when an individual investor considers SRI products. Gil-Bazo et al (Gil-Bazo, Ruiz-Verdu', & Santos; , 2010), found that SRI funds actually outperformed the conventional funds, in the

period of 1997-2005. They also found that SRI funds are cheaper compared to the conventional funds, managed by the same asset managers. However, Chang & Witte (Chang & Witte, 2010), show that even though SRI funds may be cheaper in terms of fees as suggested by Gil-Bazo (Gil-Bazo, Ruiz-Verdu', & Santos; , 2010), the returns have been lower compared to the conventional funds for the 15 years of data they incorporated in their research.

Derwall et al (Derwall, Koedijk, & Horst, 2011), suggested that SRI performances in short-term could be showing different results, but in the long run there is a declining pattern in socially responsible abnormal returns over time. They attribute this to the correction of investors expectations with time. Das & Rao (Das & Rao, 2013), in their study of 94 SR funds available for purchase by public in the period of 1995 - 2007, found that active management in SRI adds value. Their argument is that socially responsible investing screening process provides the fund managers with an additional perspective to identify best companies in terms of future financial performance. In a study of European stocks for the period of 2002 – 2012, Bertrand & Lapointe (Bertrand & Lapointe, 2014) investigated how using a socially responsible investment universe impacted performance of risk-based allocation strategies. And they found that, the use of the SRI universe had a positive contribution to risk-adjusted performance of risk-based allocations. A report by Morningstar (Morningstar, 2016) concluded that according to their research, sustainable/responsible funds and indexes were found to perform at the same levels with conventional funds and indexes that were comparable, even though it may be contrary to the suggestions of the theory. They also contended, companies with higher ESG ranking could outperform comparable firms in both accounting terms and stock market terms.

Finally, they suggested a focus on company-level ESG factors to be more effective for better risk adjusted performance at the portfolio level, compared to exclusionary screening approach.

Data and Methodology

We start with our timeline of the study which is the 10 years going back from the last reported quarter of performance at the time of our project initiation. Our study, therefore, focuses on quarterly time increments, starting from the 2010 Q3 to 2019 Q3 – 40 quarters of data. We use Bloomberg fund screening tool to arrive at 59 funds with an SRI mandate. We calculate the quarterly returns for all the funds and compare it with the benchmark at four distinct attributes:

- **Excess Return:** After calculating the quarterly returns for each of the funds from the opening and closing values of the quarter, we take the geometric mean for the entire time horizon. Then we compare that mean return of individual funds with the benchmark, to arrive at the excess return for each.

$$\text{Excess Returns}_{\text{Fund A}} = \text{Mean Return of Fund A} - \text{Mean Return of Benchmark}$$

- **Alpha:** We calculated Jensen's alpha, that uses a similar structure as CAPM to arrive at the excess returns. For MSCI KLD 400, against S&P 500, the calculation would be as follows:

$$R_{\text{MSCI KLD 400}} - R_F = \alpha_{\text{MSCI KLD 400}} + \beta_{\text{MSCI KLD 400}} (R_{\text{S\&P 500}} - R_F) + \varepsilon_{\text{MSCI KLD 400}}$$

where

$R_{\text{MSCI KLD 400}}$ = Quarterly return of the MSCI KLD 400

R_F = Quarterly mean of 3-month T-bill rates

$R_{\text{S\&P 500}}$ = Quarterly return of the S&P 500

$\varepsilon_{\text{MSCI KLD 400}} = \text{Residual}$

We cover a little background on how Jensen's Alpha emerged shortly after the assumptions in this segment.

- Beta: We run the regression for each of the return data set of the funds against the benchmark returns to arrive at the β coefficient. It is worth noting at this point that the β coefficients for the MSCI KLD 400 was lower against both the market indexes, compared to JANTZI.
- Excess standard-deviation-adjusted Return (eSDAR): We calculate a measure unique to the work of Statman (1987, 2000) called "excess standard-deviation-adjusted return," or eSDAR. This is a modified version of Sharpe ratio (Statman 1987; Modigliani and Modigliani 1997) which follows the following approach to calculation:

$$\text{eSDAR} = R_F + \left(\frac{R_{\text{MSCI KLD 400}} - R_F}{SD_{\text{MSCI KLD 400}}} \right) SD_{\text{S\&P 500}} - R_{\text{S\&P 500}}$$

Jensen's Alpha:

Jensen's alpha has been in use for a long time in Finance, by practitioners and academics combined, exploring how a stock has faired against expectations of its investors. According to the Capital Asset Pricing Model (CAPM), we have:

$$E[R_s] = R_f + \beta [E(R_m) - R_f]$$

This formula was modified by Jensen [1968] as he expressed it in the following approach:

$$[\tilde{R}_{s,t} - R_{f,t}] = \beta [\tilde{R}_{m,t} - R_{f,t}] + \varepsilon_{s,t}$$

If $[\tilde{R}_{m,t} - R_{f,t}]$ is taken as an independent variable and $[\tilde{R}_{s,t} - R_{f,t}]$ as a dependent variable, then estimating parameters of a linear regression $[\tilde{R}_{s,t} - R_{f,t}] = \hat{\alpha} + \hat{\beta} [\tilde{R}_{m,t} - R_{f,t}] + e_{s,t}$

generates an intercept which is α . Now, if this intercept value is equal to zero then it is inferred that the stock has performed in par with CAPM expectations. When the intercept has a positive value, it means the stock has done better than expected. Following the same logic, a negative value indicates it has underperformed. (Musumeci, 2016)

Risk-free rate and benchmark selection

The risk-free rate is assumed to be the quarterly T-bill rate average for the time horizon concerned. For benchmarking purposes, we choose two of the most well recognized SRI indexes in MSCI KLD 400 and JANTZI. Also, for comparing the performance with the market in general, we take S&P 500 and S&P/TSX 60. We go over a brief discussion on each of the indexes mentioned aside from S&P 500, which is assumed to be the market index for majority of the investment purposes and quite well established in its definition in that regard.

MSCI KLD 400

Founded by Amy Domini of DSI and first launched in 1990, MSCI KLD 400 Social Index is one of the first and notable indexes regarding social responsibility investing. According to MSCI, MSCI KLD 400 is a capitalization weighted index of 400 US Securities that provides investors with exposure to companies possessing outstanding ESG score (MSCI, 2019). Accordingly, it also excludes those firms whose products have negatively social or environmental influences. Although ignoring negatively impacted firms, KLD 400 maintains the sector weights similar to MSCI USA Index, ranging from -25% to +25%. According to MSCI 2019, Information Technology and Communication Services are the top two attributers of the index with the weights of 27.12% and 14.15% respectively. Meanwhile, Utilities merely accounts for more than 2% of the index's weight.

In terms of methodology, firstly, MSCI KLD 400 excludes all the firms whose operations involved in Nuclear Power, Tobacco, Alcohol, Gambling, Military Weapons, Civilian Firearms, GMOs and Adult Entertainment. Then, qualified companies regarding ESG performance, sector alignment and size representation will be added (MSCI, 2019). In the quarterly Index Review, if the constituent is deleted from the MSCI USA IMI Index, fails the exclusion tests or possesses the downgraded ESG score, it will also be excluded from MSCI KLD 400. On the other hand, others that are currently not existing constituents of MSCI KLD 400 will be eligible as if it has an MSCI ESG Rating greater than 'BB' or the MSCI ESG Controversies greater than 2. After each review, the additions will replace the deleted and bring the number back to 400. The index is rebalanced based on Semi-Annual and Quarter basis.

JANTZI Index

Initiated in 2000 by Jantzi Research, now Sustainalytics, Jantzi Index (JSI) targeted at institutional investors by serving as a benchmark in measuring socially screened portfolios performance and by playing a vital role in investment product development, including index mutual funds, index portfolios, index ETFs, index futures and options.

According to JANTZI Social Index Methodology updated March 2016, the JANTZI Social Index – a market capitalization-weighted Canadian index, comprises of 50 companies passing the ESG screening criteria. The weight of any constituent of JSI is capped at 10% of the index. The index is built using exclusionary criteria. Consequently, it ignores products involved with military contracting, alcohol and tobacco and other companies that have major negative impacts. In terms of index weight, as of November 25th, 2019, Financials sector accounts for the largest portion (32.48%), followed by Industrials and

Energy with the weights of 15.22% and 15.03% respectively. Meanwhile, Real Estate is the smallest one within the index merely weighting 0.42%.

S&P / TSX 60

The S&P/TSX 60 is a composite index that mimics the sector weights of the S&P/TSX Composite. It was designed to serve those investment managers who look for a portfolio index of the large-cap market segment of the Canadian equity market. The Toronto Stock Exchange (TSX) serves as the distributor of both real-time and historical data for this index.

Regarding methodology, JSI follows similar steps as MSCI KLD 400 including company selection and investability guarantee. Companies with leading sustainable performance based on Sustainalytics's Best-of-Sector methodology (better ESG performance than the peers') are chosen. In addition, in order to ensure investment capability, the investable market capitalization must be maintained at least at 50% of the market capitalization of S&P/TSX 60. JSI also keeps its single sector not 5% over or under weight compared to the sector weight in S&P/TSX 60. During the review process, changes may be made to maintain the overall performance by removing the lagging companies and adding those with leading ESG performance. JSI Index is reviewed annually in March based on the close price of the last business day in February (Jantzi Social Index Methodology, March 2016).

Sample of Fund Screening Output

Fund Name	Boston Common International Fund
Ticker	BCAIX
Management Company Name	Boston Common Asset Management
Screening Process	Data from external sources and databases including ESG street Research, company filings, news database, etc., is collected and analyzed by the company’s professionals. All data will be integrated to form a comprehensive understanding about the company. Additional information including filings, trade journals, industry reports, legal proceeds, legal contracts, etc is also taken into consideration. Information regarding company management is attained through meeting, e-mails and other forms of communication.
Screening Criteria	The fund excludes companies whose activities involved with alcohol, irresponsible influence on animal welfare, weapons, gambling and tobacco. Also, BCAIX incorporated ESG criteria in its screening. For instance, the fund focuses on the company promoting human right, highly investing in clean technology or enabling shareholders’ impacts on firm’s decision making. On the other hand, BCAIX avoids companies with history of labor standard violation or environmentally contaminated records.

Table B: Fund Screening Sample Output

Findings and Analysis

We first look at the index returns in isolation to get an idea about the passive investment attributes. If an investor were to invest in an index comprised of company stocks with a good ESG standing, then it would be a passive exposure to Socially Responsible Investing. We compare passive SRI exposure performance with passive overall market exposure performance.

Q3'10 – Q3'19	MSCI KLD 400	JSI	S&P 500	S&P/TSX 60
Mean Annual Return	11.15%	2.40%	11.44%	0.98%
Mean Annual Volatility	11.91%	16.24%	12.39%	15.77%
β (S&P 500, S&P/TSX 60)	.95, .56	1.02, 1.01		
α (S&P 500, S&P/TSX 60)	0.10%, 8.98%	-9.22%, 1.46%		

Table C: Performance of Indexes

We observe that one index MSCI KLD 400 has outperformed both the market indexes for the time period of our study, which means passive SRI has outperformed the market returns in general. Interesting takeaway here is, even though JSI lags significantly behind S&P 500 in terms of risk-return attributes, it beats S&P/TSX 60 performances from which the JSI is modeled. So, it can be inferred that both Social Indexes did better than the market index it represents. And the difference in the performance of the two indexes can clearly be attributed to the diversification effect, as one of them is composed of 400 stocks and the other is composed of only 50 stocks.

Now we move on to study the actively managed SRI funds. We look at it at two phases: first, we compare the fund performances against the diversified benchmarks, i.e. MSCI KLD 400 and S&P 500. Then we move on to compare it with JSI and S&P/TSX 60.

Table D: Numbers in decimal format	KLD as the benchmark						S&P 500 as the benchmark			
	Return	Volatility	Excess Returns	Alpha	Beta	eSDR	Excess Returns	Alpha	Beta	eSDR
ACCESS CAPITAL COMMUNITY-I	-0.008	0.011	-0.119	-0.045	0.003	-0.544	-0.122	-0.045	0.002	-0.565
AZZAD ETHICAL FUND	-0.041	0.097	-0.152	-0.096	0.242	-0.170	-0.155	-0.097	0.249	-0.177
LKCM AQUINAS CATHOLIC	-0.034	0.125	-0.146	-0.105	0.454	-0.143	-0.149	-0.107	0.460	-0.148
AB SUST INTL THEMATIC-B	-0.011	0.102	-0.122	-0.081	0.442	-0.130	-0.125	-0.083	0.452	-0.135
BOSTON CMMN ESG IMPCT INTL	-0.010	0.074	-0.121	-0.065	0.243	-0.151	-0.124	-0.066	0.245	-0.157
BOSTON CMMN ESG IMPCT US EQ	-0.006	0.073	-0.117	-0.065	0.297	-0.144	-0.120	-0.068	0.323	-0.150
BLACKROCK IMPACT US EQ-INS	-0.011	0.086	-0.123	-0.080	0.426	-0.141	-0.125	-0.080	0.408	-0.146
CALIFORNIA T/F INCOME FD	-0.007	0.017	-0.118	-0.042	-0.020	-0.384	-0.121	-0.042	-0.018	-0.399
CALVERT GREEN BOND FUND-A	-0.001	0.015	-0.113	-0.038	-0.002	-0.377	-0.116	-0.038	-0.009	-0.392
COLUMBIA US SOCIAL BOND-A	0.011	0.015	-0.101	-0.026	-0.006	-0.277	-0.103	-0.026	-0.004	-0.288
CRA QUALIFIED INVESTMENT FND	-0.005	0.013	-0.117	-0.041	-0.016	-0.455	-0.120	-0.041	-0.014	-0.473
DFA EMERG MKTS SOCIAL CORE	-0.007	0.105	-0.119	-0.062	0.236	-0.125	-0.122	-0.064	0.259	-0.130
DFA US SOCIAL CORE EQUITY 2	0.009	0.082	-0.102	-0.052	0.332	-0.115	-0.105	-0.054	0.341	-0.119
DOMINI IMPACT INTL EQ-INV	-0.014	0.091	-0.125	-0.068	0.226	-0.141	-0.128	-0.070	0.239	-0.146
BNYM SUSTAIN US EQTY-Z	-0.041	0.120	-0.153	-0.094	0.207	-0.152	-0.156	-0.095	0.214	-0.158
DOMINI IMPACT BOND FUND-INV	-0.009	0.018	-0.120	-0.044	-0.021	-0.368	-0.123	-0.044	-0.021	-0.383
DOMINI IMPACT EQUITY-INV	-0.026	0.098	-0.138	-0.091	0.372	-0.152	-0.141	-0.093	0.378	-0.157
FIDELITY NEW MILLENNIUM FUND	-0.037	0.118	-0.148	-0.103	0.389	-0.149	-0.151	-0.105	0.402	-0.155
TRIBUTARY GRWTH OPP-INST	-0.046	0.124	-0.157	-0.109	0.353	-0.154	-0.160	-0.111	0.366	-0.160
GREEN CENTURY EQUITY-INV	0.018	0.064	-0.094	-0.041	0.286	-0.110	-0.097	-0.042	0.289	-0.115
CATHOLIC SRI GROW-HC STR	-0.030	0.097	-0.142	-0.107	0.539	-0.157	-0.144	-0.107	0.513	-0.163
JPM MUNICIPAL INCOME-I	-0.010	0.016	-0.122	-0.046	-0.013	-0.424	-0.125	-0.047	-0.011	-0.441
PRAXIS GENESIS BALANCED-A	-0.007	0.053	-0.118	-0.058	0.194	-0.172	-0.121	-0.059	0.201	-0.179
PRAXIS GENESIS CONSERV-A	-0.005	0.030	-0.117	-0.049	0.094	-0.244	-0.119	-0.050	0.098	-0.254
PRAXIS GENESIS GROWTH	-0.009	0.070	-0.120	-0.065	0.255	-0.152	-0.123	-0.066	0.264	-0.158
PRAXIS GROWTH INDEX-A	0.015	0.073	-0.097	-0.047	0.328	-0.111	-0.100	-0.048	0.338	-0.115
PRAXIS SMALL CAP INDEX-A	-0.041	0.142	-0.152	-0.093	0.200	-0.140	-0.155	-0.095	0.222	-0.145
PRAXIS VALUE INDEX FD-A	0.009	0.086	-0.103	-0.051	0.310	-0.114	-0.106	-0.053	0.316	-0.118
NEUBERG BERM MUNI IMPCT-INST	-0.002	0.017	-0.114	-0.037	-0.025	-0.343	-0.117	-0.038	-0.021	-0.357
PUTNAM SUSTAIN FUTURE-A	-0.023	0.128	-0.135	-0.103	0.566	-0.131	-0.138	-0.105	0.574	-0.136
PAX ELLEVATE GL WMANS IN-INV	-0.005	0.081	-0.117	-0.062	0.273	-0.137	-0.119	-0.064	0.285	-0.142
RIVERBRIDGE ECO LEADERS-INST	-0.029	0.114	-0.140	-0.108	0.567	-0.144	-0.143	-0.109	0.563	-0.149
BARCLAYS RETURN ON DISABILIT	0.029	0.248	-0.083	-0.053	0.597	-0.079	-0.086	-0.049	0.527	-0.082
STEWART SM-MID CAP ENH-INST	-0.041	0.131	-0.153	-0.106	0.364	-0.146	-0.156	-0.108	0.380	-0.152

STEWARD SELECT BOND-INST	-0.021	0.014	-0.132	-0.058	0.009	-0.554	-0.135	-0.058	0.010	-0.575
STEWARD LRG CAP ENH INDX-INS	-0.020	0.098	-0.132	-0.076	0.253	-0.144	-0.135	-0.078	0.269	-0.150
STEWARD GLBL EQTY INC-INST	-0.018	0.083	-0.129	-0.077	0.295	-0.153	-0.132	-0.078	0.298	-0.159
STEWARD INTL ENH INDX-INST	-0.018	0.082	-0.130	-0.074	0.256	-0.155	-0.132	-0.076	0.265	-0.161
FUNDX SUSTAINABLE IMPACT	0.009	0.068	-0.102	-0.053	0.334	-0.123	-0.105	-0.053	0.326	-0.128
SEI INST INV SCREENED WLD-A	-0.003	0.082	-0.115	-0.061	0.284	-0.133	-0.118	-0.063	0.295	-0.138
1919 SOCIALLY RESP BAL-A	-0.035	0.077	-0.146	-0.087	0.199	-0.186	-0.149	-0.088	0.210	-0.193
TIMOTHY PLAN AGGRESS GRWTH-	-0.014	0.114	-0.125	-0.073	0.293	-0.128	-0.128	-0.075	0.314	-0.133
TIMOTHY PLAN CONSERV GRWTH-	-0.006	0.054	-0.117	-0.055	0.160	-0.169	-0.120	-0.056	0.170	-0.175
TOWLE DEEP VALUE FUND	-0.024	0.171	-0.135	-0.084	0.314	-0.117	-0.138	-0.085	0.316	-0.121
TOUCHSTONE GLBL ESG EQ-A	-0.035	0.106	-0.147	-0.094	0.284	-0.156	-0.150	-0.096	0.298	-0.162
TIMOTHY PLAN FIXED INCOME-A	-0.018	0.017	-0.130	-0.055	-0.001	-0.470	-0.132	-0.055	-0.003	-0.489
TIAA-CREF LIFE SOC CH EQTY	-0.112	0.128	-0.224	-0.178	0.389	-0.214	-0.227	-0.177	0.362	-0.222
TIMOTHY PL LRG/MID CAP VAL-A	-0.018	0.104	-0.130	-0.078	0.298	-0.138	-0.133	-0.080	0.312	-0.143
TIMOTHY PLAN DEF STRAT-A	-0.018	0.057	-0.130	-0.064	0.116	-0.190	-0.133	-0.065	0.124	-0.197
TIMOTHY PLAN HIGH YIELD BD-A	-0.043	0.031	-0.154	-0.087	0.099	-0.380	-0.157	-0.088	0.101	-0.395
TIMOTHY PLAN INTERNATIONAL-	0.004	0.082	-0.108	-0.055	0.299	-0.122	-0.110	-0.057	0.304	-0.127
TIMOTHY PLAN SML CAP VALUE-A	-0.010	0.138	-0.122	-0.076	0.378	-0.115	-0.125	-0.078	0.393	-0.120
TIAA-CREF SOC CHOICE BND-INS	0.000	0.018	-0.112	-0.037	-0.011	-0.317	-0.115	-0.037	-0.011	-0.329
TIMOTHY PLAN STRATEGIC GR-A	0.014	0.059	-0.097	-0.040	0.235	-0.120	-0.100	-0.041	0.244	-0.125
TRILLIUM SMALL/MID CAP-INST	-0.029	0.108	-0.141	-0.100	0.447	-0.147	-0.144	-0.100	0.432	-0.153
VALIC I SOCIAL AWARENESS FD	0.015	0.066	-0.097	-0.040	0.242	-0.114	-0.100	-0.041	0.250	-0.119
VALIC II-SOCAILLY RESPONSIBL	0.015	0.062	-0.097	-0.043	0.280	-0.117	-0.099	-0.044	0.286	-0.121
VANGUARD FTSE SOC INDX-INV	0.019	0.065	-0.093	-0.039	0.272	-0.108	-0.096	-0.040	0.282	-0.112
BARCLAYS WOMEN IN	-0.012	0.090	-0.124	-0.078	0.380	-0.140	-0.127	-0.077	0.362	-0.145
Mean	-0.014	0.080	-0.125	-0.069	0.251	-0.196	-0.128	-0.070	0.255	-0.204
Standard Deviation	0.022	0.045	0.022	0.027	0.161	0.116	0.022	0.027	0.158	0.120

Table D: Performance SRI Funds vs Diversified Benchmarks

As we observe the values for individual funds for the four parameters of measures established by Statman (2000), we see that most funds in that period did not generate a positive return for their investors. Therefore, not a single fund was able to generate a positive alpha compared to either of the benchmark indexes.

Due to the very nature of the return figures, we also observe a very low beta trend for all these firms, as they do not mimic the performance of the market for the most part.

From an investor's perspective, if a SRI investment opportunity is to be explored for the same risk profile (of that of a 8% volatility, as is the mean volatility of the set), much superior return performances could be availed through investing in a portfolio that comprises of a combination of weights in MSCI KLD 400 and the risk free instrument (T-bills in this context), if historical data is taken as a viable basis for portfolio composition.

In other words, our study suggests, an investor looking for an exposure into socially responsible investment, is much better off doing so in a passive approach compared to an active one.

Now we move on to performance comparison with more concentrated large-cap stock indexes in JSI and S&P/TSX 60. We see a very similar trend on this table of results as well. However, due to these two indexes having inferior performance figures, a few of the funds were able to outperform them by a narrow margin.

It reinforces our prior finding with respect to the passive approach to SRI investment, that even if some of the funds outperformed these indexes, the investor is still better off investing in a diversified passive portfolio than to seek alpha in an active approach.

Table E: Numbers in decimal format	JANTZI as the benchmark						S&P /TSX 60 as the benchmark			
	Return	Volatility	Excess Returns	Alpha	Beta	eSDR	Excess Returns	Alpha	Beta	eSDR
ACCESS CAPITAL COMMUNITY-I	-0.008	0.011	-0.032	-0.044	0.014	-0.627	-0.017	-0.044	0.018	-0.594
AZZAD ETHICAL FUND	-0.041	0.097	-0.065	-0.074	0.294	-0.117	-0.051	-0.070	0.280	-0.099
LKCM AQUINAS CATHOLIC	-0.034	0.125	-0.058	-0.065	0.447	-0.080	-0.044	-0.059	0.444	-0.063
AB SUST INTL THEMATIC-B	-0.011	0.102	-0.035	-0.042	0.417	-0.063	-0.020	-0.036	0.425	-0.047
BOSTON CMMN ESG IMPCT INTL	-0.010	0.074	-0.034	-0.043	0.285	-0.091	-0.020	-0.040	0.271	-0.074
BOSTON CMMN ESG IMPCT US EQ	-0.006	0.073	-0.030	-0.039	0.294	-0.082	-0.016	-0.035	0.281	-0.065
BLACKROCK IMPACT US EQ-INS	-0.011	0.086	-0.035	-0.042	0.436	-0.078	-0.021	-0.036	0.429	-0.061
CALIFORNIA T/F INCOME FD	-0.007	0.017	-0.031	-0.044	-0.004	-0.409	-0.016	-0.044	0.000	-0.382
CALVERT GREEN BOND FUND-A	-0.001	0.015	-0.025	-0.038	0.018	-0.400	-0.011	-0.038	0.029	-0.374
COLUMBIA US SOCIAL BOND-A	0.011	0.015	-0.013	-0.026	0.003	-0.263	0.001	-0.026	0.011	-0.241
CRA QUALIFIED INVESTMENT FND	-0.005	0.013	-0.029	-0.042	0.005	-0.506	-0.015	-0.042	0.009	-0.477
DFA EMERG MKTS SOCIAL CORE	-0.007	0.105	-0.031	-0.039	0.380	-0.056	-0.017	-0.034	0.397	-0.040
DFA US SOCIAL CORE EQUITY 2	0.009	0.082	-0.015	-0.023	0.337	-0.042	0.000	-0.018	0.333	-0.026
DOMINI IMPACT INTL EQ-INV	-0.014	0.091	-0.038	-0.047	0.320	-0.078	-0.024	-0.043	0.302	-0.061
BNYM SUSTAIN US EQTY-Z	-0.041	0.120	-0.065	-0.074	0.319	-0.093	-0.051	-0.070	0.304	-0.076
DOMINI IMPACT BOND FUND-INV	-0.009	0.018	-0.033	-0.045	0.014	-0.388	-0.018	-0.045	0.018	-0.362
DOMINI IMPACT EQUITY-INV	-0.026	0.098	-0.050	-0.059	0.365	-0.092	-0.036	-0.054	0.354	-0.075
FIDELITY NEW MILLENNIUM FUND	-0.037	0.118	-0.061	-0.068	0.416	-0.089	-0.046	-0.063	0.407	-0.072
TRIBUTARY GRWTH OPP-INST	-0.046	0.124	-0.070	-0.077	0.434	-0.095	-0.055	-0.071	0.423	-0.078
GREEN CENTURY EQUITY-INV	0.018	0.064	-0.006	-0.016	0.255	-0.036	0.008	-0.012	0.251	-0.020
CATHOLIC SRI GROW-HC STR	-0.030	0.097	-0.054	-0.061	0.473	-0.099	-0.040	-0.055	0.442	-0.082
JPM MUNICIPAL INCOME-I	-0.010	0.016	-0.034	-0.047	0.009	-0.464	-0.020	-0.047	0.014	-0.436
PRAXIS GENESIS BALANCED-A	-0.007	0.053	-0.031	-0.041	0.210	-0.120	-0.016	-0.038	0.210	-0.102
PRAXIS GENESIS CONSERV-A	-0.005	0.030	-0.029	-0.041	0.113	-0.218	-0.015	-0.039	0.115	-0.197
PRAXIS GENESIS GROWTH	-0.009	0.070	-0.033	-0.042	0.271	-0.093	-0.018	-0.038	0.270	-0.076
PRAXIS GROWTH INDEX-A	0.015	0.073	-0.009	-0.019	0.292	-0.037	0.005	-0.015	0.284	-0.021
PRAXIS SMALL CAP INDEX-A	-0.041	0.142	-0.065	-0.073	0.398	-0.076	-0.050	-0.067	0.374	-0.059
PRAXIS VALUE INDEX FD-A	0.009	0.086	-0.015	-0.024	0.308	-0.041	-0.001	-0.020	0.305	-0.025
NEUBERG BERM MUNI IMPCT-INST	-0.002	0.017	-0.026	-0.039	0.012	-0.354	-0.012	-0.039	0.020	-0.329
PUTNAM SUSTAIN FUTURE-A	-0.023	0.128	-0.047	-0.054	0.504	-0.064	-0.033	-0.047	0.492	-0.047
PAX ELLEVATE GL WMANS IN-INV	-0.005	0.081	-0.029	-0.038	0.307	-0.072	-0.015	-0.034	0.301	-0.055
RIVERBRIDGE ECO LEADERS-INST	-0.029	0.114	-0.053	-0.060	0.465	-0.081	-0.039	-0.053	0.457	-0.064
BARCLAYS RETURN ON DISABILIT	0.029	0.248	0.005	-0.007	0.075	0.008	0.019	-0.003	0.198	0.022
STEWARDS SM-MID CAP ENH-INST	-0.041	0.131	-0.066	-0.073	0.463	-0.085	-0.051	-0.066	0.450	-0.067

STEWARD SELECT BOND-INST	-0.021	0.014	-0.045	-0.057	0.031	-0.640	-0.030	-0.057	0.036	-0.607
STEWARD LRG CAP ENH INDX-INS	-0.020	0.098	-0.044	-0.053	0.360	-0.082	-0.030	-0.048	0.345	-0.065
STEWARD GLBL EQTY INC-INST	-0.018	0.083	-0.042	-0.051	0.297	-0.094	-0.027	-0.047	0.296	-0.077
STEWARD INTL ENH INDX-INST	-0.018	0.082	-0.042	-0.051	0.323	-0.096	-0.028	-0.046	0.328	-0.079
FUNDX SUSTAINABLE IMPACT	0.009	0.068	-0.015	-0.024	0.303	-0.053	0.000	-0.020	0.298	-0.037
SEI INST INV SCREENED WLD-A	-0.003	0.082	-0.027	-0.036	0.331	-0.067	-0.013	-0.031	0.330	-0.050
1919 SOCIALLY RESP BAL-A	-0.035	0.077	-0.059	-0.068	0.276	-0.139	-0.044	-0.065	0.262	-0.120
TIMOTHY PLAN AGGRESS GRWTH-	-0.014	0.114	-0.038	-0.045	0.427	-0.059	-0.024	-0.040	0.403	-0.043
TIMOTHY PLAN CONSERV GRWTH-	-0.006	0.054	-0.030	-0.040	0.224	-0.116	-0.015	-0.037	0.222	-0.098
TOWLE DEEP VALUE FUND	-0.024	0.171	-0.048	-0.054	0.518	-0.045	-0.033	-0.047	0.489	-0.029
TOUCHSTONE GLBL ESG EQ-A	-0.035	0.106	-0.059	-0.068	0.327	-0.098	-0.045	-0.064	0.301	-0.080
TIMOTHY PLAN FIXED INCOME-A	-0.018	0.017	-0.042	-0.055	0.021	-0.526	-0.028	-0.054	0.028	-0.496
TIAA-CREF LIFE SOC CH EQTY	-0.112	0.128	-0.136	-0.145	0.348	-0.177	-0.122	-0.140	0.342	-0.157
TIMOTHY PL LRG/MID CAP VAL-A	-0.018	0.104	-0.042	-0.051	0.372	-0.073	-0.028	-0.045	0.364	-0.057
TIMOTHY PLAN DEF STRAT-A	-0.018	0.057	-0.042	-0.053	0.170	-0.144	-0.028	-0.050	0.183	-0.125
TIMOTHY PLAN HIGH YIELD BD-A	-0.043	0.031	-0.067	-0.078	0.139	-0.404	-0.053	-0.076	0.146	-0.377
TIMOTHY PLAN INTERNATIONAL-	0.004	0.082	-0.020	-0.029	0.300	-0.052	-0.006	-0.025	0.290	-0.036
TIMOTHY PLAN SML CAP VALUE-A	-0.010	0.138	-0.034	-0.041	0.479	-0.043	-0.020	-0.035	0.459	-0.027
TIAA-CREF SOC CHOICE BND-INS	0.000	0.018	-0.024	-0.037	0.037	-0.317	-0.010	-0.036	0.046	-0.293
TIMOTHY PLAN STRATEGIC GR-A	0.014	0.059	-0.010	-0.019	0.250	-0.049	0.005	-0.016	0.252	-0.033
TRILLIUM SMALL/MID CAP-INST	-0.029	0.108	-0.053	-0.060	0.459	-0.086	-0.039	-0.054	0.433	-0.069
VALIC I SOCIAL AWARENESS FD	0.015	0.066	-0.009	-0.019	0.249	-0.041	0.005	-0.015	0.246	-0.025
VALIC II-SOCAILLY RESPONSIBL	0.015	0.062	-0.009	-0.019	0.238	-0.045	0.005	-0.016	0.229	-0.029
VANGUARD FTSE SOC INDX-INV	0.019	0.065	-0.005	-0.015	0.255	-0.033	0.009	-0.012	0.249	-0.017
BARCLAYS WOMEN IN	-0.012	0.090	-0.036	-0.044	0.449	-0.076	-0.022	-0.037	0.451	-0.059
Mean	-0.014	0.080	-0.038	-0.047	0.273	-0.153	-0.023	-0.043	0.270	-0.134
Standard Deviation	0.022	0.045	0.022	0.021	0.154	0.158	0.022	0.021	0.145	0.153

Table E: Performance SRI Funds vs Large-Cap Benchmarks

Research Contribution

Our research adds a new perspective on a very trendy topic in financial literary work of late. As covered in our literature review section, we find there are primarily two schools of thought when it comes to SRI, one who claim that SRI does not beat conventional returns, as the added constraint make the optimization set reduced – which in turn, makes diversification more costly for the overall portfolio.

The other group claims that there are no significant changes in returns, some say the pattern is unclear as SRI at times perform better than conventional portfolios, other times it is the other way around.

Our study reveals that the passive investment into SRI diversified index actually surpasses its comparable market index. Also, when managed actively, SRI funds do not capture the value as the passive approach does. So, if historical performance is any indication of what is ahead, investors looking to invest with SRI exposure should combine their passive SRI exposure with the risk-free rate according to their respective risk profiles.

Research Limitations

We only use Statman’s approach to study the data, while still a valid method to explore the results, a combination of different models could have shed some more insights into the topic. In addition, our study only takes the last 10 years data into consideration, if we could have looked at the decade-by-decade data from the past 50 years – we could study the patterns of how SRI is evolving and whether our findings can stand the test of time.

Future Research

To build on our work, we contend that exploring the reason behind the performance discrepancies between the active and passive investments would be the most interesting addition to the study. The interplay of allocation, selection, and interaction in explaining the tracking error would be a significant finding complementing our work. Also, getting a sense of what type of firms get involved in SRI would also be an interesting aspect to explore, answering the question – is ESG an affordable approach for all companies?

Conclusion

As per our findings, we conclude that the performance of actively managed SRI funds have not been generating value for the investors over the last decade. However, SRI as a passive investment avenue has outperformed the market in both levels of diversified approach that we studied. Our study took a different path to how Statman (Statman, 2000) originally explored the topic. We studied the funds on a quarterly frequency and also, we added the perspective of a couple of lesser diversified benchmarks, all applied to a different time-period. Our findings are consistent with the study done by Bauer et al (Bauer, Koedijk, & Otten, 2005), where they also found performance estimates to be robust for inclusion of ethical indexes, but surprisingly, were not incrementally capable of explaining ethical mutual fund return variation. We believe that screening the stocks on an ESG perspective from a diversified pool of stocks do add value, as it captures the long-term sustainability element of those companies, however, having SRI as the mandate of the fund management has not proven to be a productive investment approach.

Appendix: SRI Fund Characteristics

Ticker	Name	Domicile	Equity Type Focus (Style Based)	Tot Ret Ytd (%)	NAV (\$b)	Expense Ratio	12B Fee (%)	Front Load (%)	Back Load (%)
ACCSX US Equity	ACCESS CAPITAL COMMUNITY-I	United States	N.A.	5.8	8.97	0.65	0	3.75	0
ADJEX US Equity	AZZAD ETHICAL FUND	United States	Growth	25.6	15.22	0.99	0.15	0	0
AQEIX US Equity	LKCM AQUINAS CATHOLIC EQUITY	United States	Blend	25.7	16.09	1	0.1	0	1
AWPBX US Equity	AB SUST INTL THEMATIC-B	United States	Growth	19.2	14.43	2.26	1	0	4
BCAIX US Equity	BOSTON CMMN ESG IMPCT INTL	United States	Blend	18.1	30.94	1.12	0	0	0
BCAMX US Equity	BOSTON CMMN ESG IMPCT US EQ	United States	Blend	22.3	45.26	1	0	0	2
BIRIX US Equity	BLACKROCK IMPACT US EQ-INS	United States	Blend	25.5	14.03	0.54	0	0	0
CFNTX US Equity	CALIFORNIA T/F INCOME FD	United States	N.A.	4.1	11.57	0.69	0	0	0
CGAFX US Equity	CALVERT GREEN BOND FUND-A	United States	N.A.	7.8	15.78	0.85	0.25	3.75	0
CONAX US Equity	COLUMBIA US SOCIAL BOND-A	United States	N.A.	6.9	10.5	0.81	0.25	3	0.75
CRAIX US Equity	CRA QUALIFIED INVESTMENT FND	United States	N.A.	5.3	10.64	0.91	0.25	0	0
DFESX US Equity	DFA EMERG MKTS SOCIAL CORE	United States	Blend	9.9	13.38	0.53	0	0	0
DFUEX US Equity	DFA US SOCIAL CORE EQUITY 2	United States	Blend	24.9	17.35	0.28	0	0	0
DOMIX US Equity	DOMINI IMPACT INTL EQ-INV	United States	Blend	12.9	8.01	1.46	0	0	0
DRTHX US Equity	BNYM SUSTAIN US EQTY-Z	United States	Blend	28.3	13.3	0.78	0	0	0
DSBFX US Equity	DOMINI IMPACT BOND FUND-INV	United States	N.A.	8.5	11.55	0.93	0	0	0
DSEFX US Equity	DOMINI IMPACT EQUITY-INV	United States	Growth	26.0	23.49	1.14	0.25	0	0
FMLX US Equity	FIDELITY NEW MILLENNIUM FUND	United States	Value	22.3	38.04	0.64	0	0	0
FOGRX US Equity	TRIBUTARY GRWTH OPP-INST	United States	Growth	27.1	17.49	1.13	0	0	0
GCEQX US Equity	GREEN CENTURY EQUITY-INV	United States	Blend	25.2	47.87	1.25	0	0	0
HCSRX US Equity	CATHOLIC SRI GROW-HC STR	United States	Blend	18.4	12.35	0.6	0.25	0	0
HLTAX US Equity	JPM MUNICIPAL INCOME-I	United States	N.A.	5.4	9.71	0.44	0	0	0
MBAPX US Equity	PRAXIS GENESIS BALANCED-A	United States	Blend	15.2	14.21	1.05	0.25	5.25	2
MCONX US Equity	PRAXIS GENESIS CONSERV-A	United States	N.A.	11.3	12.14	0.6	0.25	5.25	2
MGAFX US Equity	PRAXIS GENESIS GROWTH	United States	Blend	17.7	15.65	0.62	0.25	5.25	2
MGNDX US Equity	PRAXIS GROWTH INDEX-A	United States	Growth	24.9	27.58	0.86	0.25	5.25	2
MMSCX US Equity	PRAXIS SMALL CAP INDEX-A	United States	Value	16.1	8.62	1.67	0.25	5.25	2
MVIAX US Equity	PRAXIS VALUE INDEX FD-A	United States	Value	26.6	14.96	0.94	0.25	5.25	2
NMIIX US Equity	NEUBERG BERM MUNI IMPCT-INST	United States	N.A.	5.7	17.58	0.43	0	0	0

PMVAX US Equity	PUTNAM SUSTAIN FUTURE-A	United States	Growth	23.4	17.73	1.07	0.25	5.75	0
PXWEX US Equity	PAX ELLEVATE GL WMANS IN-INV	United States	Blend	20.9	26.32	0.81	0.25	0	0
RIVEX US Equity	RIVERBRIDGE ECO LEADERS-INST	United States	Growth	27.1	15.05	1.16	0	0	0
RODI US Equity	BARCLAYS RETURN ON DISABILIT	United States	Blend	22.0	85.4437	0.45	0	0	0
SCECX US Equity	STEWARD SM-MID CAP ENH-INST	United States	Value	16.7	14.11	0.57	0	0	0
SEACX US Equity	STEWARD SELECT BOND-INST	United States	N.A.	6.3	24.82	0.66	0	0	0
SEECX US Equity	STEWARD LRG CAP ENH INDX-INS	United States	Blend	24.5	45.25	0.54	0	0	0
SGISX US Equity	STEWARD GLBL EQTY INC-INST	United States	Blend	21.1	33	0.68	0	0	0
SNTCX US Equity	STEWARD INTL ENH INDX-INST	United States	Value	14.7	21.9	0.71	0.25	0	0
SRIFX US Equity	FUNDX SUSTAINABLE IMPACT	United States	Growth	21.3	28.25	1.35	0	0	0
SSEAX US Equity	SEI INST INV SCREENED WLD-A	United States	Blend	18.7	11.23	0.8	0	0	0
SSIAX US Equity	1919 SOCIALLY RESP BAL-A	United States	Growth	20.5	19.89	1.26	0.25	5.75	1
TAAGX US Equity	TIMOTHY PLAN AGGRESS GRWTH-A	United States	Growth	23.0	8.39	1.59	0.25	5.5	0
TCGAX US Equity	TIMOTHY PLAN CONSERV GRWTH-A	United States	Blend	12.6	10.82	1.02	0	5.5	0
TDVFX US Equity	TOWLE DEEP VALUE FUND	United States	Value	20.1	13.98	1.2	0	0	0
TEQAX US Equity	TOUCHSTONE GLBL ESG EQ-A	United States	Blend	16.4	21.38	1.19	0.25	5	0
TFIAX US Equity	TIMOTHY PLAN FIXED INCOME-A	United States	N.A.	6.7	10.37	1.1	0.25	4.5	0
TLCHX US Equity	TIAA-CREF LIFE SOC CH EQTY	United States	Growth	6.3	15.93	0.22	0.18	0	0
TLVAX US Equity	TIMOTHY PL LRG/MID CAP VAL-A	United States	Value	23.0	19.4	1.41	0.25	5.5	0
TPDAX US Equity	TIMOTHY PLAN DEF STRAT-A	United States	Blend	10.5	11.67	1.3	0.25	5.5	0
TPHAX US Equity	TIMOTHY PLAN HIGH YIELD BD-A	United States	N.A.	13.8	9.45	1.24	0.25	4.5	0
TPIAX US Equity	TIMOTHY PLAN INTERNATIONAL-A	United States	Blend	18.2	9.54	1.64	0	5.5	0
TPLNX US Equity	TIMOTHY PLAN SML CAP VALUE-A	United States	Value	26.5	17.9	1.41	0.25	5.5	0
TSBIX US Equity	TIAA-CREF SOC CHOICE BND-INS	United States	N.A.	8.2	10.62	0.37	0	0	0
TSGAX US Equity	TIMOTHY PLAN STRATEGIC GR-A	United States	Value	15.6	9.86	1.05	0	5.5	0
TSMDX US Equity	TRILLIUM SMALL/MID CAP-INST	United States	Blend	22.1	12.73	1	0	0	2
VCSOX US Equity	VALIC I SOCIAL AWARENESS FD	United States	Blend	21.4	28.32	0.62	0.12	0	0
VCSRX US Equity	VALIC II-SOCAILLY RESPONSIBL	United States	Blend	25.7	23.15	0.56	0	0	0
VFTSX US Equity	VANGUARD FTSE SOC INDX-INV	United States	Blend	26.3	20.74	0.2	0	0	0
WIL US Equity	BARCLAYS WOMEN IN LEADERSHIP	United States	Value	21.0	71.6204	0.45	0	0	0

Table F: SRI Fund Attributes

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