The Effect of Socially Responsible Investing on Financial Performance*

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Abstract

It is a widespread belief that socially responsible investors suffer a performance loss. In our study for US stocks we investigate the relation between diverse socially responsible screens and financial performance. Our results from 1991 till 2004 indicate that socially responsible investors do not suffer a performance loss. On the contrary, portfolios consisting of stocks controversial from a socially responsible perspective do predominantly suffer a performance loss. Thus, a trading strategy based on two equity portfolios, one with a high and one with a low socially responsible score, generally leads to a positive abnormal performance. Overall, these findings suggest that investors can achieve their ethical goals without hurting their financial performance.

JEL Classification: G11, G12, G20, G23, M14

Keywords: Socially Responsible Investing, Portfolio Management, Trading Strategy

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1 Introduction

Socially responsible investing (SRI) is a steadily growing market segment. This growth is stimulated by investors who incorporate diverse social and environmental screens into their investment process. Almost one out of every ten dollars under professional management in the US today is invested according to socially responsible principles.[1]

Socially responsible investors pay attention to various ethical criteria. The Social Investment Forum (SIF) reports that socially responsible mutual funds employ screens such as tobacco, alcohol, community, employee relations, environment and diversity.[2] Generally, a distinction can be drawn between the negative and positive screens. If socially responsible investors follow the negative screening policy, they exclude all companies from the investment opportunity set which are involved in perceived controversial business areas, e.g. alcohol or tobacco. The positive screening policy does not lead to an exclusion of certain types of companies and is based on different screens. The positive screens used for the evaluation encompass e.g. employee relations and community. The companies with the highest social ratings constitute the investment opportunity set.

In our study we examine a multitude of socially responsible criteria. A negative screen is constructed by excluding all companies involved in the alcohol, tobacco, gambling, military, firearms or nuclear power business. Furthermore, we investigate the following positive screens: community, diversity, employee relations, environment, human rights and product. To analyze the performance of investors employing all the former positive screens, we form a combination of them. To examine investors' performance who comply with both the aforementioned negative and positive screens, we construct a combination of all these screens.[3]

[1] See Social Investment Forum (2005).

[2] For a complete list of screens see Social Investment Forum (2005).

[3] Different opinions exist about what constitutes socially responsible behavior. To operationalize the concept of socially responsible behavior, we use the KLD Research criteria which may be viewed as a broader consensus on social responsibility.

To answer the question how socially responsible investing affects financial performance, naturally the predictions of the financial theory are considered first. The efficient market hypothesis states that at any given time, security prices fully reflect all available information. Therefore, socially responsible investors should not earn an abnormal performance by screening their investments. Furthermore, an artificially constrained socially responsible portfolio should lead to an inferior financial performance, because it is not well-diversified. However, SRI proponents raise the possibility that social and environmental issues might not be correctly priced by the market and generate a positive abnormal performance in the long-run. Nevertheless, it is an empirical question how the different screening policies will affect socially responsible investors' portfolio performance.

Along with the growth of socially responsible investment the number of academic studies related to this topic increased. There are many mutual fund studies which compare a portfolio of SRI mutual funds with a portfolio of conventional funds.[4] Yet, mutual fund studies have several weaknesses. The financial returns of mutual funds depend on the stock picking and timing ability of the fund management. Unfortunately, the ability of the fund management cannot be separated from the financial performance of ethical stocks. In addition, different screens cannot be analyzed separately, because mutual funds often employ several screens together or do not even disclose all screens employed.

To overcome the problems associated with the mutual fund studies, various studies examine the effect of social and environmental screens on financial performance by using data on company level. Several survey studies (e.g. Orlitzky, Schmidt, and Rynes (2003); Griffin and Mahon (1997)) analyze the empirical literature that examines the link between corporate social responsibility (CSR) and financial performance. Orlitzky, Schmidt, and Rynes (2003) find a weaker positive correlation between CSR and market-based financial performance than between CSR and accounting-based measures. Furthermore, they identify only a few studies which evaluate the relationship between CSR and market-based

[4]For example the following studies: Hamilton, Jo, and Statman (1993), Sauer (1997), Statman (2000), Geczy, Stambaugh, and Levin (2003), Bauer, Koedijk, and Otten (2005), Kreander, Gray, Power, and Sinclair (2005) and Barnett and Salomon (2006).

measures. Either the performance is derived from the CAPM model or the raw return act as a market-based measure. The studies do not apply a multifactor model. In this paper we examine returns of equity portfolios, because we are interested in the investor's perspective.

The results of previous studies, analyzing synthetic portfolios of stocks, are inconclusive. Some studies investigate the environmental and stock return link, but neglect the social issues. While Yamashita, Sen, and Roberts (1999) and Derwall, Günster, Bauer, and Koedijk (2005) find a significant positive performance difference between an environmental high-rated and low-rated portfolio, Cohen, Fenn, and Konar (1997) find no performance difference. Analyzing only the environmental screen is especially unsatisfying as social issues are an essential component of socially responsible investing. The Social Investment Forum (SIF) reports that 64 percent of the socially responsible mutual funds employ five and more screens.[5] Because corporate social responsibility is a multi-dimensional construct, the wrong inferences might be drawn from investigating only one aspect. Investigating several diverse socially responsible screens Diltz (1995), using the CAPM model, finds that during the time period 1989-1991 the environmental and military screen yielded significantly positive performance and all other screens did not have a significant impact on performance. Guerard (1997), examining also several social screens, concludes that by using a stock selection model socially screened portfolios do not differ from an unscreened portfolio.

In this paper, we address three questions. Does an investor suffer a performance loss by investing in stocks with high SRI ratings? Does an investor suffer a performance loss by investing in stocks with low SRI ratings? Does a trading strategy in stocks, based on past SRI ratings, lead to an abnormal performance? Our contribution to the existing literature is threefold: 1) We examine a multitude of socially responsible criteria as opposed to analyzing only the environmental screen. 2) To measure financial performance, we employ the Carhart four-factor model.[6] Surprisingly, this multifactor or alternatively

[5]See Social Investment Forum (2005).

[6]The Carhart model consists of the three Fama/French factors and an additional momentum factor identified by Jegadeesh and Titman (1993). We also employed the Fama/French model

the Fama/French three-factor performance attribution model, well-accepted in the finance literature, has not been considered in previous studies.[7] To investigate the existence of a socially responsible investing effect on performance, this effect has to be isolated from other well-known phenomena. Not considering these phenomena or factors, respectively, might lead to biased estimations of performance. 3) Using the KLD Research & Analytics Inc. data from 1991-2004, we investigate the longest time horizon and largest sample so far.

Our results concerning financial performance differ for the high-rated and low-rated portfolio. The high-rated (low-rated) portfolio consists of stocks with high (low) ratings on the investigated screen. The results for the positive screening indicate that there is no performance loss for high-rated portfolios. This result applies to all screens: community, diversity, employee relations, environment, human rights, product, negative screen, a combination of all positive screens, and a combination of all positive and negative screens. Therefore, the results of the high-rated portfolios suggest that socially responsible investors do not sacrifice financial performance by reaching their ethical goals. Dissimilar results emerge from investigating the low-rated portfolios. Investors investing in the low-rated portfolio would generally have to pay a performance penalty. This is true for the following screens: community, diversity, employee relations, a combination of all positive screens, and a combination of all positive and negative screens. The negative performance cannot be explained by industry effects, market sensitivity or different portfolio constructions.

Finally, we examine a trading strategy going long in the high-rated portfolio and short in the low-rated portfolio. We find a predominantly positive abnormal performance of the trading strategies. For the positive screening policy the community, employee relations, environment, a combination of all positive screens and a combination of all positive and negative screens have a positive significant performance. The abnormal positive performance of a trading strategy is driven by the low-rated portfolio. Overall, these results suggest that a trading strategy

which leads to the same findings.

[7]Exceptions to this are Derwall, Günster, Bauer, and Koedijk (2005) investigating only the environmental screen for the US market and Rennings, Schröder, and Ziegler (2004) analyzing the European stock market controlling for the factors identified by Fama and French (1993).

could generate abnormal profits.

The remainder of the paper proceeds as follows. The data is described in section 2. Section 3 defines the methodology used. Section 4 reports the empirical results. Section 5 concludes.

2 Data

In our study we use the KLD ratings data to measure the social responsibility of a company. The ratings are available from 1991 until 2004 on an annual basis. The data set covers all the S&P 500 and Domini 400 Social Index stocks for the whole time period.[8] As illustrated in figure 1, the number of rated companies has been extended over time. It covers about 3000 stocks now, including all stocks of the Russell 3000.

- insert FIGURE 1 about here -

KLD evaluates the companies according to multiple criteria. This enables us to examine each criterion and the effects on financial performance independently. KLD discerns between two broad categories: qualitative and exclusionary criteria. The qualitative ratings measure CSR across a range of issues which impact the company's various stakeholders. They are used for the positive screening policy. The exclusionary screens reflect company involvement in business areas of interest to social investors. Thus, they are needed for the negative screening policy.

We investigate the following six qualitative criteria: community, diversity, employee relations, environment, human rights and product.[9] For each criterion KLD evaluates multiple sub-criteria, which can be divided into strengths and concerns. For example a cash profit sharing program for the workforce would be a strength and poor safety standards for the workforce would be a concern for the employee relations screen. The sub-criteria have a zero/one score. The presence of a strength or a concern is indicated by one, the absence of a strength

[8]The Domini 400 Social Index (DS 400) is an index provided by KLD.

[9]To acquire more detailed information about the KLD ratings criteria, please visit http://www.kld.com/research/stats/indicators.html.

or a concern is indicated by zero. Therefore, a concern can be transformed into a strength by taking the binary complement. After this transformation we sum up the sub-criteria and normalize this sum to a range from zero to one. These derived ratings for each criterion are used throughout the paper. Additionally, one overall rating is constructed by calculating the average of all qualitative criteria. This average rating, called combination 1 for the remaining part of the paper, allows to measure the overall effect of all qualitative criteria on financial performance.

The exclusionary screens, which are often referred to as controversial business issues, are alcohol, tobacco, gambling, military, nuclear power and firearms.[10] For certain social investors the involvement in controversial business areas might be a reason to exclude these stocks from their portfolio. KLD assigns only ratings of concern for these screens. To construct a negative screen, we exclude all companies involved in at least one controversial business area.

To test the possible screening of social investors, who rule out the companies involved in controversial business areas and additionally consider the qualitative screens, we construct a screen called combination 2 for the remaining part of this paper. The rating for this screen is the same as for combination 1. The only modification is that all companies involved in at least one controversial business area are excluded from the investment universe.

To check for relationships between the different screens we compute the average correlation from 1991 till 2004 as shown in table 1. The correlation between the alcohol and tobacco screen is the highest with 0.37. This indicates that companies involved in tobacco are sometimes also involved in alcohol. Overall, the results suggest that we can measure the performance effect of each screen separately, because multicolinearity is not an issue.

- insert TABLE 1 about here -

Financial performance is measured by stock returns. To retrieve the monthly stock returns, the CRSP stocks database is used. The CRSP stocks database cov-

[10]The screen firearms has been evaluated since 1998.

ers all the companies listed on the NYSE, NASDAQ and AMEX stock exchanges.

3 Methodology

3.1 Portfolio Formation

In order to analyze the effects of SRI screens on financial performance, we form two stock portfolios based on the one-year lagged socially responsible ratings and then examine their portfolio performance in the subsequent year.

In the following we describe the portfolio construction for all applied screens. The portfolios are constructed from our annual KLD ratings. In a first step the stocks are ranked according to their socially responsible ratings. After this, the stocks are divided into two portfolios. The high-rated portfolio consists of the upper 10% of all ranked stocks. The low-rated portfolio consists of the lower 10% of all ranked stocks. Each portfolio is then value-weighted.[11] Because KLD provides their updated socially responsible ratings every year in December, the portfolios are restructured every year in December. This yields a time series of monthly returns on each portfolio from 1992-2004. If companies vanish or their stock prices are not available in the CRSP database during the year, the stocks are sold at the last available month and their sales revenue are reinvested value-weighted in the still existing stocks.

To overcome a possible favoring of certain industries by using the positive screening policy, the best-in-class policy has been developed. For the best-in-class approach we first divide the companies into ten different industry classes based on their SIC code.[12] Then we rank the stocks according to their SRI ratings within each industry class. The portfolios for every industry class are formed

[11] If there are stocks with the same rating inside and outside the 20% portfolio, then all these stocks will be assigned to the portfolio. For the construction of a value-weighted portfolio we compute a synthetic capitalization for the stocks with same rating. We compute this synthetic capitalization by taking the real capitalization times the ratio of stocks with the same rating inside the portfolio and the sum of all stocks with the same rating - inside and outside.

[12] The classification of the ten industry classes is taken from the Kenneth R. French data library.

as described above. To merge the different industry portfolios to one final time series, we compute the value-weighted CRSP industry weights and weight the industry returns according to these weights. Thus, the best-in-class approach mitigates the sensitivity of financial performance to certain industries and leads to industry-balanced investment portfolios.

The negative screening policy demands for a slight change of the portfolio construction process. We do not take a certain percentage of all rated stocks, but we form one portfolio excluding all the stocks involved in controversial business areas. This portfolio is denoted as high-rated. The opposite portfolio, consisting of the companies which are involved in controversial business areas, is denoted as the low-rated portfolio.

In addition, we examine the performance of a long-short portfolio which consists of a long position in the high-rated portfolio and a short position in the low-rated portfolio. Thus, the long-short portfolio is a zero-investment strategy. If the market is efficient and the right performance attribution framework is used, there should be no abnormal return.

3.2 Performance Measurement

To examine the relation between different screens and portfolio performance, the Carhart (1997) four-factor model, which controls for risk and style factors, is implemented. The four factors are market, size, book-to-market and momentum.[13] We estimate the following regression:

$$R_{it} - R_{ft} = \alpha_i + \beta_{1i} \left(R_{mt} - R_{ft}\right) + \beta_{2i} SMB_t + \beta_{3i} HML_t + \beta_{4i} MOM_t + \varepsilon_{it}, \quad (1)$$

where the dependent variable is the monthly return on portfolio i in month t minus the risk-free rate. The independent variables are the returns of the four zero-investment factor portfolios. $R_{mt} - R_{ft}$ denotes the excess return of the market portfolio over the risk-free rate. SMB_t denotes the return

[13] The model consists of the Fama/French 3-factor model and a one-year momentum factor, which was found by Jegadeesh and Titman (1993).

difference between a small and large capitalization portfolio in month t. HML_t denotes the return difference between a high and low book-to-market portfolio in month t.[14] A stock with a low book-to-market ratio is often referred to as value stock, while a high book-to-market ratio indicates a growth stock. MOM_t denotes the return difference between a portfolio of low and high past returns of the past twelve months.[15] Alpha is the abnormal return of the portfolio i.

4 Empirical Results

In this section, we investigate the relation between the diverse social screens and their financial performance. First, we examine positive, negative and best-in-class screening separately. Then we analyze the sensitivity of our results to different sub-periods, to the portfolio weighting method and to the number of stocks included in the portfolios.

Table 2 summarizes the results of the Carhart model from 1992-2004 for positive and negative screens. Alpha in the second column of the table measures the annualized abnormal performance of the portfolio. The low-rated portfolio is significant negative for the positive screens community, diversity, employee relations, combination 1 and combination 2. Combination 1 is the average rating of the ratings on community, diversity, employee relations, environment, human rights and product. Combination 2 is the same as combination 1 except that all companies involved in at least one controversial business area are excluded from the portfolio. The results suggest that especially unethical companies have a negative impact on financial performance. For the high-rated portfolios the alphas are not significantly different from zero. These results indicate that socially responsible investors do not suffer a performance loss by buying the high-rated portfolios, but would gain money by selling the low-rated portfolio.

- insert TABLE 2 about here -

[14] The excess return of the market portfolio, the size and the value factor were taken from the Kenneth R. French data library.

[15] The momentum factor was kindly provided by Mark M. Carhart.

The long-short portfolio, which is a trading strategy going long in the high-rated portfolio and short in the low-rated portfolio, yields a significant positive performance for the community, employee relations, environment, combination 1 and combination 2 screen. All other trading strategies generate mostly positive, but not significant performance. The trading strategies are driven by the significant negative performance of the low-rated portfolios.

Negative screening did not lead to any significant performance effect. The high-rated portfolio for the negative screen consists of the companies not involved in the controversial business areas, whereas the low-rated portfolio consists only of the companies involved in controversial business areas.

Table 3 reports the estimation results of the Carhart model as in equation 1 for the best-in-class screening policy.[16] By construction the best-in-class approach leads to industry-balanced portfolios. The alphas of the high-rated portfolios are insignificant for different screens. In contrast, the low-rated portfolio yields significant negative performance for community, diversity, employee relations, environment, combination 1 and combination 2. The alphas for the trading strategies based on the community, employee relations, combination 1 and combination 2 screens are positively significant. All other trading strategies generate mostly positive, but not significant performance. Overall, the findings underline the results as presented in table 2. Thus, the results cannot be explained by industry effects. Socially responsible investors might also invest their money according to the best-in-class approach without paying a performance penalty. However, investors should be cautious about investing in companies with low social responsibility.

- insert TABLE 3 about here -

The factor loadings of the Carhart model in table 2 and 3 are generally significant. In addition to the excess return, the size, value and momentum factor loadings are predominantly significant and thus underscore the importance of considering these factors. Both the high-rated and the low-rated portfolio

[16]Unlike in table 2 the negative screen is missing. This is due to the fact that the best-in-class approach considers all industries, but that the negative screening policy already excludes certain industries.

mostly exhibit a significant negative size factor. This implies a bias to the large capitalization stocks in the KLD data. The value factor loading is mostly smaller for the high-rated portfolio than for the low-rated portfolio. This indicates that the high-rated portfolios tend to be more growth-oriented. The momentum factor is generally significant negative. A significant negative momentum factor manifests that the portfolio consists to a greater extent of bad last year performing stocks. For the high-rated portfolio this indicates ceteris paribus that there exists a somewhat negative relationship between previous year financial performance and subsequent year socially responsible rating. We expected a positive relationship because of the often stated argument that only companies with good financial performance can afford to be socially responsible.[17]

To check if the results are sensitive to portfolio construction, we form an equally-weighted portfolio. Table 4 reports the annualized alpha of the different portfolios from 1992 till 2004 for the different screens and screening policies. The results are similar to the value-weighted portfolio construction. The long-short strategy generally yields a positive performance for both the positive and the best-in-class screening policy. Again this result is driven by the low-rated portfolios.

- insert TABLE 4 about here -

To examine if the results depend on the number of stocks included in the portfolio, we formed a high-rated (low-rated) portfolio consisting of the upper (lower) 25% of all ranked stocks. Table 5 exhibits the annualized alpha from 1992 till 2004 for the different screens and screening policies.[18] The results are consistent with the statements derived from table 2 and 3. The trading strategy yields generally a positive performance driven by the significant negative performance of the low-rated portfolios.

- insert TABLE 5 about here -

In tables 6 to 7, we report the alpha of the Carhart model for two sub-periods. We compare these two sub-periods to investigate if there is a structural break induced by the market crash. The first sub-period spans the time from 1992 till

[17] See e.g. Moskowitz (1972).

[18] Because of the different portfolio construction the negative screen is not reported.

2000 and the second sub-period extends from 2001 till 2004. Both, the high-rated and the low-rated portfolio, generally cannot resist the trend of the market. A trading strategy based on the different screens and screening policies is generally positive in both sub-periods. The low-rated portfolios generally yield an inferior performance to the high-rated portfolios. The reduction of significant results is due to the loss of observations. This highlights the importance of a large sample to derive meaningful results.

- insert TABLE 6 and TABLE 7 about here -

From the performance of the high-rated portfolios one can conclude that socially responsible investors do not sacrifice performance by reaching their ethical goals. In contrast, the low-rated portfolios predominantly suffer a significant performance loss. Investors should be cautious about an investment in the low-rated companies. Furthermore, the trading strategies based on the different screens are generally positive. The trading strategies are driven by the low-rated portfolios. The community, diversity, employee relations, combination 1 and combination 2 screen exhibit significant negative abnormal performance for the positive and best-in-class screening. The significant negative performance suggests that the market does not price the low-rated stocks correctly. Finally, our results cannot be explained by industry effects, time effects or by portfolio construction effects.

5 Conclusion

There is a long-running controversy about the impact of socially responsible investing on financial performance. Socially responsible investors can apply different screens and screening policies to construct a socially responsible equity portfolio. The performance of the socially responsible portfolio indicates whether investors sacrifice performance by investing socially responsible. In addition, investors might not only buy a portfolio of high social responsibility, but also sell a portfolio of low social responsibility. We examine if this trading strategy, going long in the portfolio of high social responsibility and

short in the portfolio of low social responsibility, yields an abnormal performance.

Using the KLD ratings data from 1991 till 2004, we find that the performance of the socially responsible portfolios are never significantly negative. This implies that socially responsible investors do not suffer a performance loss by reaching their ethical goals. In contrast, the companies with low social responsibility suffer a significant performance loss for the following screens: community, diversity, employee relations, a combination of all qualitative screens and a combination of all qualitative plus exclusionary screens. These results suggest that the market might not correctly price companies with low social responsibility. Therefore, we find that the trading strategies based on the screens community, employee relations, a combination of all qualitative screens and a combination of all qualitative plus exclusionary screens yield an abnormal performance for the positive screening policy as well as for the best-in-class screening policy. Our results cannot be explained by an industry bias, by market sensitivity or by different portfolio constructions.

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Figure 1: Number of Screened Companies from 1991 till 2004

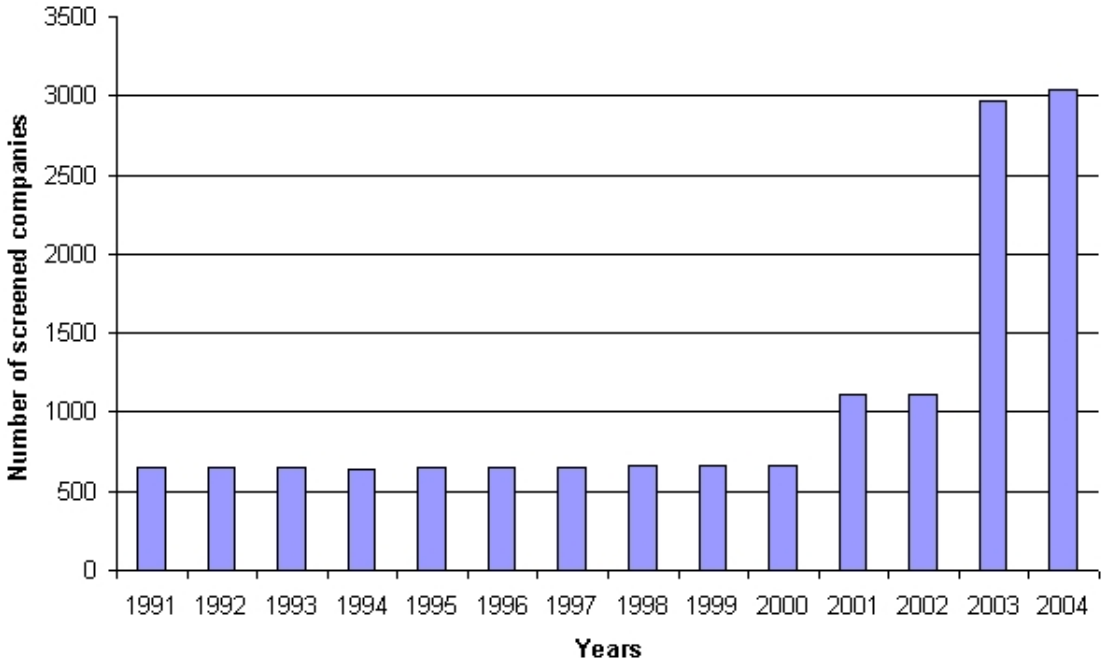

Table 1: Correlation Matrix of the diverse screens

	Alc.	Com.	Div.	Em. Rel.	Env.	Fir.	Gamb.	Hum. Rig.	Mil.	Nuc. Pow.	Pro.	Tob.
Alcohol	1.00	−0.06	−0.04	0.02	−0.01	0.00	−0.01	0.05	−0.02	−0.02	0.08	0.37
Community	−0.06	1.00	0.34	0.11	0.10	0.05	0.01	−0.03	−0.01	0.05	−0.06	−0.05
Diversity	−0.04	0.34	1.00	0.13	0.02	0.03	0.00	−0.08	−0.03	−0.02	−0.07	−0.02
Em. Relations	0.02	0.11	0.13	1.00	0.09	0.01	0.03	0.02	0.02	0.06	0.13	0.00
Environment	−0.01	0.10	0.02	0.09	1.00	0.01	−0.01	0.16	0.15	0.15	0.25	0.01
Firearms	0.00	0.05	0.03	0.01	0.01	1.00	0.00	0.03	0.16	−0.01	0.02	0.00
Gambling	−0.01	0.01	0.00	0.03	−0.01	0.00	1.00	0.01	0.01	−0.02	0.05	0.04
Human Rights	0.05	−0.03	−0.08	0.02	0.16	0.03	0.01	1.00	0.10	−0.01	0.13	0.04
Military	−0.02	−0.01	−0.03	0.02	0.15	0.16	0.01	0.10	1.00	0.06	0.08	−0.01
Nuclear Power	−0.02	0.05	−0.02	0.06	0.15	−0.01	−0.02	−0.01	0.06	1.00	0.09	−0.02
Product	0.08	−0.06	−0.07	0.13	0.25	0.02	0.05	0.13	0.08	0.09	1.00	0.13
Tobacco	0.37	−0.05	−0.02	0.00	0.01	0.00	0.04	0.04	−0.01	−0.02	0.13	1.00

Notes: This table summarizes the average correlations from 1991 till 2004 between all the qualitative and negative screens. The abbreviations of the first row are derived from the full names for each screen as displayed in the first column.

Table 2: Positive & Negative Screening from 1992 to 2004

	Alpha	Market	Size	Value	Mom	R^2
Community						
high-rated	0.90	0.88^{***}	-0.30^{***}	0.12^{**}	-0.08^{***}	0.88
low-rated	-3.46^{**}	1.07^{***}	-0.13^{***}	0.31^{***}	-0.01	0.89
long-short	4.36^{*}	-0.19^{***}	-0.17^{***}	-0.19^{***}	-0.08^{**}	0.12
Diversity						
high-rated	-1.59	0.93^{***}	-0.28^{***}	0.02	-0.02	0.90
low-rated	-4.02^{**}	1.09^{***}	0.00	0.15^{***}	-0.07^{***}	0.88
long-short	2.43	-0.17^{**}	-0.27^{***}	-0.13^{*}	0.05	0.21
Em. Relations						
high-rated	1.90	1.01^{***}	-0.17^{***}	-0.31^{***}	-0.05^{**}	0.86
low-rated	-4.33^{***}	1.04^{***}	-0.18^{***}	0.37^{***}	-0.09^{***}	0.89
long-short	6.23^{**}	-0.03	0.01	-0.68^{***}	0.03	0.47
Environment						
high-rated	2.26	0.95^{***}	-0.14^{*}	-0.17^{***}	-0.11^{***}	0.80
low-rated	-2.30	0.91^{***}	-0.30^{***}	0.26^{***}	0.01	0.83
long-short	4.55^{*}	0.04	0.16^{**}	-0.43^{***}	-0.11^{***}	0.34
Human Rights						
high-rated	-0.18	0.89^{***}	-0.22^{***}	0.08^{***}	0.04	0.92
low-rated	-1.93	0.98^{***}	-0.26^{***}	0.14^{**}	-0.05^{***}	0.89
long-short	1.75	-0.09^{**}	0.04	-0.06	0.09^{***}	0.12
Product						
high-rated	-0.56	1.03^{***}	-0.06	-0.20^{***}	-0.06^{**}	0.87
low-rated	0.38	0.88^{***}	-0.39^{***}	0.15^{***}	0.00	0.87
long-short	-0.94	0.15^{**}	0.33^{***}	-0.35^{***}	-0.06^{*}	0.50
Combination 1						
high-rated	1.91	0.90^{***}	-0.19^{***}	-0.23^{***}	-0.08^{***}	0.86
low-rated	-3.03^{*}	0.95^{***}	-0.30^{***}	0.26^{***}	0.01	0.84
long-short	4.94^{**}	-0.06	0.11	-0.49^{***}	-0.09^{***}	0.36
Negative						
high-rated	-0.89	0.98^{***}	-0.23^{***}	0.04	-0.01	0.96
low-rated	-0.43	0.96^{***}	-0.11^{**}	0.03	-0.07^{***}	0.88
long-short	-0.46	0.03	-0.12	0.01	0.06^{***}	0.06
Combination 2						
high-rated	0.56	0.93^{***}	-0.21^{***}	-0.08^{**}	0.00	0.86
low-rated	-4.90^{***}	0.87^{***}	-0.32^{***}	0.20^{***}	-0.02	0.77
long-short	5.46^{**}	0.06	0.11	-0.28^{***}	0.02	0.22

Notes: This table summarizes for each screen the annualized abnormal return, factor loadings and the R^2 using the Carhart four-factor model for different portfolios. The high-rated (low-rated) portfolio consists of 10% of all stocks with the highest (lowest) rating and is value-weighted. The long-short portfolio is a trading strategy going long in the high-rated and short in the low-rated portfolio. The rating for combination 1 is the average rating of all qualitative screens. The combination 2 is similar to combination 1 except that all companies involved in controversial business areas are not included in the portfolio. Contrary to the other screens, the high-rated portfolio of the negative screen consists of all companies except the companies involved in controversial business areas. The low-rated portfolio of the negative screen consists of the companies involved in controversial business areas. ***, ** and * indicate significance at the 1%, 5% and 10% level.

Table 3: Best-in-Class Screening from 1992 to 2004

	Alpha	Market	Size	Value	Mom	R^2
Community						
high-rated	1.05	0.93^{***}	-0.20^{***}	0.06	-0.09^{***}	0.92
low-rated	-2.88^{***}	1.07^{***}	-0.15^{***}	0.14^{***}	-0.05^{***}	0.95
long-short	3.92^{**}	-0.14^{***}	-0.05	-0.09^{*}	-0.04	0.06
Diversity						
high-rated	-0.99	0.94^{***}	-0.21^{***}	0.07	-0.08^{***}	0.91
low-rated	-3.06^{*}	1.09^{***}	-0.01	0.16^{***}	-0.12^{***}	0.89
long-short	2.07	-0.15^{**}	-0.19^{***}	-0.09	0.04	0.16
Em. Relations						
high-rated	-0.15	1.00^{***}	-0.20^{***}	0.02	-0.07^{***}	0.93
low-rated	-3.74^{***}	1.07^{***}	-0.15^{***}	0.24^{***}	-0.12^{***}	0.91
long-short	3.58^{***}	-0.08^{**}	-0.04	-0.21^{***}	0.05^{**}	0.13
Environment						
high-rated	-0.19	0.98^{***}	-0.18^{***}	0.04	-0.09^{***}	0.89
low-rated	-2.45^{**}	0.94^{***}	-0.19^{***}	0.08^{**}	-0.07^{***}	0.92
long-short	2.26	0.04	0.01	-0.04	-0.02	0.00
Human Rights						
high-rated	0.19	0.96^{***}	-0.20^{***}	0.02	-0.02^{*}	0.97
low-rated	-0.54	1.03^{***}	-0.21^{***}	0.01	-0.09^{***}	0.94
long-short	0.72	-0.07^{***}	0.01	0.02	0.08^{***}	0.20
Product						
high-rated	-1.28	0.97^{***}	-0.08^{*}	0.02	-0.04	0.90
low-rated	-0.96	0.99^{***}	-0.25^{***}	0.11^{***}	-0.09^{***}	0.94
long-short	-0.33	-0.01	0.18^{***}	-0.09^{*}	0.05	0.19
Combination 1						
high-rated	1.06	0.91^{***}	-0.17^{***}	0.00	-0.07^{***}	0.91
low-rated	-3.62^{***}	1.07^{***}	-0.19^{***}	0.17^{***}	-0.13^{***}	0.90
long-short	4.68^{**}	-0.16^{***}	0.01	-0.17^{***}	0.06^{**}	0.10
Combination 2						
high-rated	1.07	0.93^{***}	-0.12^{***}	-0.02	-0.01	0.92
low-rated	-4.31^{***}	1.06^{***}	-0.20^{***}	0.13^{***}	-0.14^{***}	0.86
long-short	5.38^{**}	-0.13^{***}	0.07	-0.15^{***}	0.13^{***}	0.17

Notes: This table summarizes for each screen the annualized abnormal return, factor loadings and the R^2 using the Carhart four-factor model for different portfolios. The high-rated (low-rated) portfolio consists of 10% of all stocks with the highest (lowest) rating and is value-weighted. The long-short portfolio is a trading strategy going long in the high-rated and short in the low-rated portfolio. The rating for combination 1 is the average rating of all qualitative screens. The combination 2 is similar to combination 1 except that all companies involved in controversial business areas are not included in the portfolio. ***, ** and * indicate significance at the 1%, 5% and 10% level.

Table 4: Equally-weighted Portfolios from 1992 to 2004

Panel A: Positive & Negative Screening

	high-rated	low-rated	long-short
Community	1.01	-4.65^{***}	5.66^{***}
Diversity	-0.80	-1.24	0.44
Em. Relations	0.54	-3.05^{*}	3.60^{**}
Environment	-3.75^{***}	-6.11^{***}	2.35
Human Rights	-1.47	-1.67	0.20
Product	0.31	-1.64	1.94
Combination 1	2.09^{**}	-4.59^{**}	6.68^{***}
Negative	-1.96^{*}	-1.36	-0.61
Combination 2	1.60	-5.51^{***}	7.11^{***}

Panel B: Best-in-Class Screening

	high-rated	low-rated	long-short
Community	0.98	-2.22^{**}	3.20^{**}
Diversity	-0.40	-1.26	0.86
Em. Relations	-0.04	-2.18	2.14
Environment	-2.00^{*}	-2.65^{**}	0.64
Human Rights	-0.39	-1.15	0.76
Product	-0.86	-1.74^{*}	0.88
Combination 1	0.62	-2.62^{**}	3.25^{*}
Combination 2	1.45	-3.97^{**}	5.42^{***}

Notes: This table summarizes for each screen the annualized abnormal return using the Carhart four-factor model for different portfolios. The high-rated (low-rated) portfolio consists of 10% of all stocks with the highest (lowest) rating. Contrary to table 2 and 3, the portfolios are equally-weighted. The long-short portfolio is a trading strategy going long in the high-rated and short in the low-rated portfolio. The rating for combination 1 is the average rating of all qualitative screens. The combination 2 is similar to combination 1 except that all companies involved in controversial business areas are not included in the portfolio. Panel A presents the results for the positive and negative screening. Panel B presents the results for the best-in-class screening. ***, ** and * indicate significance at the 1%, 5% and 10% level.

Table 5: 25% Portfolios from 1992 to 2004

Panel A: Positive Screening

	high-rated	low-rated	long-short
Community	−0.40	−1.83*	1.42
Diversity	−0.15	−3.01***	2.86*
Em. Relations	0.86	−2.86***	3.72**
Environment	0.95	−2.22**	3.17**
Human Rights	−0.43	−1.39	0.95
Product	−0.51	−0.95	0.44
Combination 1	0.57	−2.45**	3.02*
Combination 2	−0.11	−2.42*	2.31

Panel B: Best-in-Class Screening

	high-rated	low-rated	long-short
Community	−0.06	−1.95**	1.89
Diversity	−0.61	−2.57**	1.96
Em. Relations	−0.23	−1.97**	1.74
Environment	−0.31	−1.60**	1.29
Human Rights	−0.24	−0.87	0.62
Product	−1.02	−0.41	−0.60
Combination 1	−0.24	−3.41***	3.17***
Combination 2	−0.60	−3.66***	3.06**

Notes: This table summarizes for each screen the annualized abnormal return using the Carhart four-factor model for different portfolios. Contrary to table 2 and 3, the high-rated (low-rated) portfolio consists of 25% of all stocks with the highest (lowest) rating. The portfolios are value-weighted. The long-short portfolio is a trading strategy going long in the high-rated and short in the low-rated portfolio. The rating for combination 1 is the average rating of all qualitative screens. The combination 2 is similar to combination 1 except that all companies involved in controversial business areas are not included in the portfolio. Panel A presents the results for the positivescreening. Panel B presents the results for the best-in-class screening. We left out the negative screen, because due to the different construction of this screen nothing changes. ***, ** and * indicate significance at the 1%, 5% and 10% level.

Table 6: Positive & Negative Screening: Sub-periods

	1992-2000	2001-2004
Community		
high-rated	−0.09	2.15
low-rated	−1.25	−7.04**
long-short	1.16	9.19*
Diversity		
high-rated	−1.56	0.43
low-rated	−5.51***	−2.41
long-short	3.96	2.84
Em. Relations		
high-rated	5.00**	−1.84
low-rated	−3.42**	−6.96***
long-short	8.42***	5.12
Environment		
high-rated	2.88	0.86
low-rated	−0.88	−2.97
long-short	3.75	3.84
Human Rights		
high-rated	1.46	−0.85
low-rated	−1.88	−2.16
long-short	3.34	1.31
Product		
high-rated	1.07	−1.05
low-rated	1.60	−1.31
long-short	−0.52	0.27
Combination 1		
high-rated	2.71	1.08
low-rated	−2.15	−4.96**
long-short	4.86	6.04
Negative		
high-rated	−0.70	−1.74
low-rated	0.52	−0.96
long-short	−1.22	−0.78
Combination 2		
high-rated	0.94	0.50
low-rated	−4.47	−3.95*
long-short	5.40	4.45

Notes: This table summarizes for each screen the annualized abnormal return using the Carhart four-factor model for different portfolios and sub-periods. The portfolios span the period of 1992 to 2000 (left panel) and 2001 to 2004 (right panel). The high-rated (low-rated) portfolio consists of 10% of all stocks with the highest (lowest) rating and is value-weighted. The long-short portfolio is a trading strategy going long in the high-rated and short in the low-rated portfolio. The rating for combination 1 is the average rating of all qualitative screens. The combination 2 is similar to combination 1 except that all companies involved in controversial business areas are not included in the portfolio. Contrary to the other screens, the high-rated portfolio of the negative screen consists of all companies except the companies involved in controversial business areas. The low-rated portfolio of the negative screen consists of the companies involved in controversial business areas. ***, ** and * indicate significance at the 1%, 5% and 10% level.

Table 7: Best-in-Class Screening: Sub-periods

	1992-2000	2001-2004
Community		
high-rated	−0.34	2.65
low-rated	−1.78	−4.13***
long-short	1.43	6.79**
Diversity		
high-rated	−1.17	−0.13
low-rated	−4.97***	−1.01
long-short	3.80*	0.88
Em. Relations		
high-rated	0.69	−1.01
low-rated	−2.87*	−5.34***
long-short	3.56**	4.33
Environment		
high-rated	−0.47	0.76
low-rated	−2.60	−0.64
long-short	2.13	1.40
Human Rights		
high-rated	0.87	−0.44
low-rated	−0.17	−0.64
long-short	1.05	0.21
Product		
high-rated	−0.78	0.10
low-rated	−1.13	−0.32
long-short	0.35	0.43
Combination 1		
high-rated	1.57	−0.76
low-rated	−3.37**	−4.09*
long-short	4.94*	3.33
Combination 2		
high-rated	2.00	−0.71
low-rated	−4.88**	−3.00
long-short	6.88**	2.29

Notes: This table summarizes for each screen the annualized abnormal return using the Carhart four-factor model for different portfolios and sub-periods. The portfolios span the period of 1992 to 2000 (left panel) and 2001 to 2004 (right panel). The high-rated (low-rated) portfolio consists of 10% of all stocks with the highest (lowest) rating and is value-weighted. The long-short portfolio is a trading strategy going long in the high-rated and short in the low-rated portfolio. The rating for combination 1 is the average rating of all qualitative screens. The combination 2 is similar to combination 1 except that all companies involved in controversial business areas are not included in the portfolio. ***, ** and * indicate significance at the 1%, 5% and 10% level.