

ANALYSIS OF SOCIALLY RESPONSIBLE INVESTMENTS (SRI) ON THE BASIS OF GLOBAL 100 RANKING

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Abstract

This paper seeks a solution as to how to influence investors' behavior and their ability to invest responsibly. The aim is to extend the traditional approach to portfolio selection by adding an ethical dimension to risk/return analysis. The first part of this study is a review of different methods of presenting the SRI outperformance – from the matching approach and fund benchmarking to comparison of the performance of the SRI index with the traditional non-screened indices. The second part compares the significance of financial outperformance of companies considered as socially responsible over any other companies on American stock markets. The last section of this paper contains the results of the performance analysis of socially screened companies over the last five years. These results support the hypothesis that social screens help investors to pick financially strong companies that give a favorable risk-expected return relation.

JEL classification: A13, C12, G11

Keywords: Socially Responsible Investment (SRI), portfolio selection, financial performance evaluation

Introduction

As the world headed into recession in 2008, financial crisis had little effect on most Americans, beyond their retirement plans. But when the uncertainty spilled over into the markets it was obvious that not only Americans would be deeply affected by the worst downturn since the Great Depression, on almost every level of life. Lending throughout the global economy was drying up which made most businesses unable to function and forced them to cut investments and jobs. Many individuals couldn't pay their mortgages and lost their homes, others drastically cut their spending. Shares slumped to their lowest level in years causing a decrease in wealth for many people throughout the world.

Amid the economic slump, people's trust in financial institutions was as scarce as good credit. This vital element of investment decision-making vanished from global markets, causing the steepest decline in many capital markets on record. Many financial institutions took government loans to avoid bankruptcy or benefited from the bailout while Main Street was still struggling, knowing that the immense social cost of the crisis would burden a generation of people around the world.

The social dimension of the crisis makes favourable conditions for promoting Socially Responsible Investments (SRI), as a remedy to profit-driven capitalism, which appears to remain behind the crisis. The shift in societal expectations can become a driver of change in shareholder activism and play an important role in promoting more responsible corporate

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behavior. It's the right time and place to present SRI as a modern theory of portfolio selection, something far beyond a fringe activity limited to people who have a problem with capitalism as a whole. This is why the focus of this paper is to present how to overcome the existing aversion to investing in a responsible manner, focusing on the financial outperformance of companies considered as responsible.

SRI as a product

While social, environmental and good corporate governance criteria are strongly related to the SRI product, it's worth having a closer look at the conventional bottom line of socially responsible enterprises. It is something like buying a car – while many of us would like to drive a near-zero emissions vehicle, there are more things to consider in the decision-making process, like the price or safety of a car. But even if we know all the facts and figures for model A, it is good to compare it with automobiles of other manufacturers. If it turns out that non-ecological cars are cheaper, have more power or higher crash-test safety ratings, it will be more rational to give up on the positive environmental impact of the vehicle, and buy one of the alternative cars. However, to make an apple-to-apple comparison, it is essential to reduce the size of the universe of cars to the subset from the same segment.

Although the same principles apply to SRI, many academics highlight only its social side, describing SRI as investing with a concern for social consequences of investments. In my opinion, such promotion of SRI can attract only people who reflect their personal values in investing, and those who have a strong need to put their savings to work in ways that support society as a whole. For those people negative screening can be a method of better long-run performance of an investment portfolio. Probably the most striking example can be found in a book entitled “The SRI advantage” by Pedro Camejo (2002):

Tobacco kills over 1000 people a day in the United States alone. Tobacco companies can succeed only if they addict millions of young people each year. (..) The day scientists discover how to overcome the chemical addiction from nicotine the tobacco companies will be financial basket cases (p. 54, 59).

American Cancer Society and World Lung Foundation estimates are even higher and it is said that about six million people are being killed each year due to tobacco use (The Tobacco Atlas, 2009). One has to admit that tobacco companies are not socially-friendly. In fact the same report says about US\$500 billion are drained annually from global economies to fight the results of smoking-related diseases. But even if you don't see a bright future for the tobacco industry you can still earn some nice money by buying stock of such companies for a short period of time. Actually this is what most people do on the capital market nowadays. The average holding period for a stock on the NYSE, at the end of 2009 was down to six months according to SG Cross Asset Research (18 June 2009). Short-term investing, or more precisely – gambling, is far away from considering the social harm of tobacco products at all.

The Market will tell you... lies?

With holding periods that short, investing starts to be about selecting the subset of stocks that is most likely to outperform the universe. That is why people in the SRI business have to eventually get off their high horses and notice that nobody will give up performance even at

the price of not acting in a socially responsible manner. Fortunately in recent years there are many publications that reveal a link between social responsibility and financial performance of investments. Some of them are based on the doctrine of utilitarianism and see the maximization of utility as a basic criterion in portfolio selection. In other words, they argue that investment decisions depend on the risk-expected return relationship more than any social aspect related to that investment. The rule is simple – if two investments bear the same level of risk, investors would prefer the one with higher expected return. On the other hand, if the level of expected return is given they try to minimize risk.

There are various research papers proving outperformance of SRI mathematically. Most of them fall within the following three categories:

- 1) Evaluating the performance of Socially Responsible Investment Funds (fund-to-fund, fund-to-benchmark comparison),
- 2) Comparing the performance of SRI indices to non-screened indices of the broad market,
- 3) Comparing the performance of socially-screened portfolios (consisted of companies from SRI rankings or indices) to non-screened indices of the broad market (i.e. S&P500).

The performance of Socially Responsible Investment Funds

Review of literature shows that SRI funds may outperform or at least have on average a similar performance to conventional funds. For example Weber, Mansfeld and Schirrmann (2010) analysed the performance of SRI funds and found that the selected SRI funds reached a significantly higher return than the MSCI World Index during the whole time of measurement between December 2001 to June 2009 and in the bull and bear phase respectively. This corresponds to results obtained by Renneboog, Horst and Zhang (2007). Although with mixed results in terms of the existence of a “smart money” effect in the SRI fund industry, they found a positive correlation between number of SRI screens and fund performance, which supports the hypothesis that the screening process generates value-relevant information.

This way of presenting SRI outperformance poses more questions than it delivers answers. Since there are various types of SRI funds, there is a problem in identifying homogeneous group from the ethical funds’ universe. On the other hand, some conventional funds gradually converge to SRI funds in terms of the holdings in their portfolios, although they don’t label themselves as such.

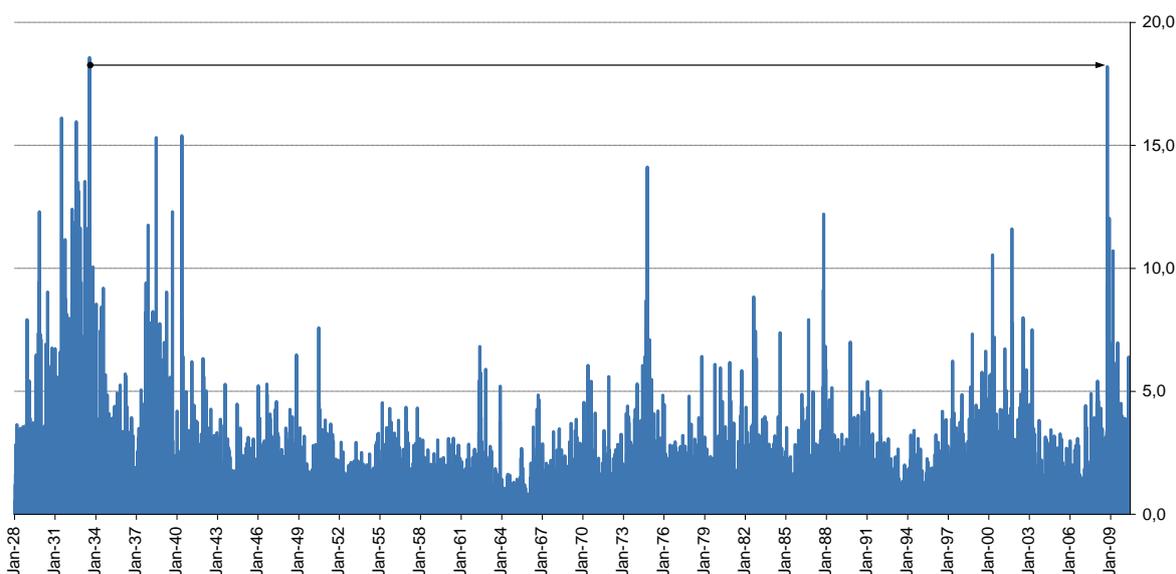
But even if we finally divide the universe of mutual funds into two classes: responsible and non-SRI funds, it would never be true apples-to-apples comparison. Funds vary in the kinds of screens they use and how they use the information derived from their screens, that’s why two funds with the same strategy can have their completely different portfolios. Some equity funds prefer growth stocks over value stocks or small-cap stocks over blue-chips. They can have its portfolio diluted or concentrated, well diversified or skewed toward one sector etc.

This brings us to another drawback of mutual funds comparison – time period. According to many articles dealing with the problem, it is recommended to use the longest possible period, but such an approach can make the results useless if there was any management switch during that time. On the other hand, short term analysis can be subject to manipulation, because even

the SRI funds that have for decades been in the bottom quartile of their category in performance can sometimes outperform their benchmark for a couple of months.

Finally, indices are passive portfolios and they can be used to compare whether a fund manager is adding any value or not. This is why most critics of investing in a responsible manner explain the outperformance of SRI funds by referring to managers' skills, detracting benefits from social screens. It is hard to disagree, particularly when equity funds generate alpha not only by stock picking but also by market timing. Increasing stock market volatility in recent years strongly supports this argument.

Chart 1: The absolute values of S&P500 weekly returns



Source: Bloomberg, own calculations

Recent volatility of capital markets affects many investors' behavior so they become less patient with their mutual funds. It is visible in the implied holding period for mutual funds which has been declining from 4.4 years in 2005 to 2.9 years at the end of 2008 (Financial Research Corporation, 2010).

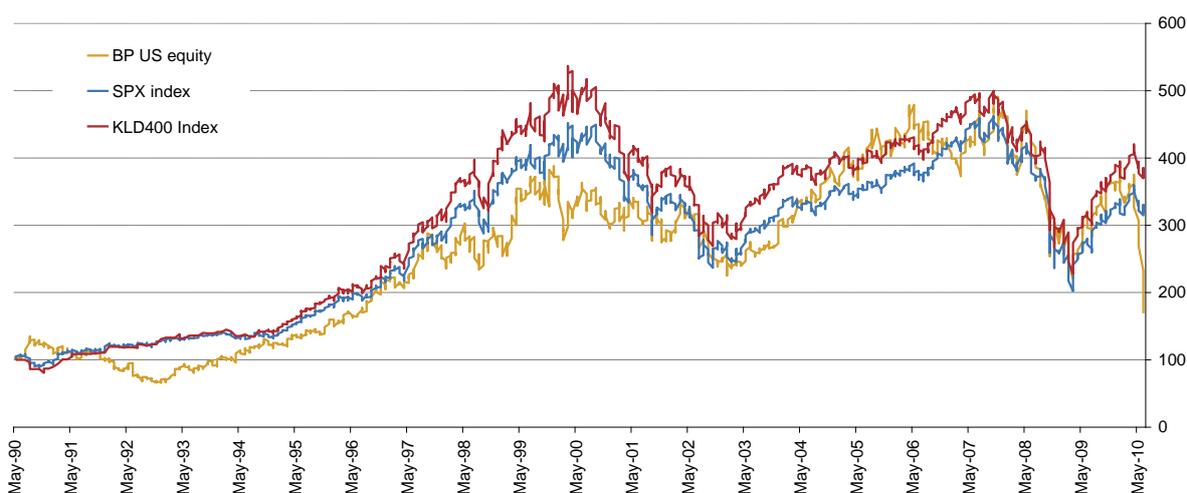
It was noticed by Danyelle Guyatt (2005, p. 141), who recognized the pull towards short-termism as one of the main obstacles to responsible investing. By increasing redemption activity of mutual funds, owners force managers to keep the focus on shorter-term goals and to maximize the degree of outperformance relative to benchmark. From a fund manager's perspective, taking a longer-term view is riskier as the rest of the market is trading on the basis of a short-term horizon. As the implementation of an SRI approach into a mutual fund's strategy requires long-term perspective and lower shareholder-redemption rates than conventional funds, it can be unpopular among fund managers especially with the current level of market entropy.

The performance of SRI indices to non-screened indices of the broad market

Since there is no strong evidence that SRI funds performance results rather from skills of active managers than from social screens, to avoid this problem it is better to look at passive

portfolio's like indices. Such a comparison answers the question as to how social screens may serve as a proxy for strong portfolio management. FTSE KLD 400 Social Index, which is a float-adjusted, market capitalization-weighted, common stock index of U.S. equities, can be given as an example. It was launched by KLD in May 1990 and became the first benchmark index constructed using environmental, social and governance (ESG) factors. It gained popularity among SRI business not only thanks to its long history and good diversity, but also to its outperformance over the S&P500, which can be seen in chart 2.

Chart 2: Comparison of BP's total shareholder return with the performance of S&P500 and KLD400 indices over a twenty-year period



Source: Bloomberg, own calculations

Although over the last twenty years FTSE KLD 400 Social Index outperformed the S&P500 by 0.6 percentage point per year, its beta coefficient is almost equal to one. It was possible thanks to the asymmetric distribution of returns and lower negative volatility - that is, slightly lower downside beta. But what is more remarkable is that the downside beta of probably the most criticized company in the world - British Petroleum (BP) - is significantly lower (based on weekly logarithmic returns from NYSE and Estrada approach, $D\beta^E = 0.88$). Does it mean that investors and analysts were chronically underestimating the risk related to BP's exploration business? Since the April 20th explosion on the Deepwater Horizon rig, the company has not only lost half of its market value but also turned into a public enemy in America. It was removed from the Dow Jones Sustainability Indexes (DJSI) and its rating was downgraded by many companies, including Vigeo, the European leading supplier of extra-financial analysis, who questions "the effectiveness of its audit systems and controls and the monitoring by the Board of key environmental and social risks." (Vigeo Rating, 2010) Analysts estimate the total cost of the Gulf of Mexico oil spill from \$29 billion to \$63 billion, however these numbers don't include the damage to BP's reputation. Advocacy organizations like Public Citizen urge consumers to stay away from BP stations, and over 800k users joined "Boycott BP" page before it was removed from Facebook. But instead of hurting the family businesses that actually own the stations, paradoxically it's in people's best interest to prevent BP from bankruptcy. Why? First of all, BP is strong enough to tackle the problem (the

company's 2009 balance sheet showed pretax earnings of \$25.1 billion and over \$8.3 billion in cash). And finally if one considered BP as one of the most sustainable corporations in the world, an example in environmental and social performance, why not give it a second try and prove you were not wrong? In other case, if BP were to file for bankruptcy, the U.S. taxpayers would have to compensate Gulf residents, as well as they would suffer a further decline in the value of their 401(k) plan's assets. In times of high budget deficits, that would be socially irresponsible.

Although there is no doubt that some SRI indices outperform indices of the broad market, there are many doubts in using them to measure the advantage of social screens over non-screened portfolio selection. The central argument is the number of stocks that any index consists of (i.e. the FTSE KLD 400 Social Index represents the performance of 400 U.S. equities). Since most research papers put the optimal number of stocks in portfolio in the 20-30 range, investors are forced to choose only a small subset from the universe of companies from the SRI index, so they are not able to make the most of its advantages. It also makes their money vulnerable to negative performance due to unfortunate stock picking.

While BP's case is an excellent example of how fragile the reputation of a socially and environmentally responsible company might be, one can argue that social screens do not prevent investors from spectacular loss in portfolio value. The next section presents empirical evidence on benefits from investing in a long-term responsible manner.

SRI leads to increase of performance – indirect proof

So, was Warren Buffett a little too optimistic saying that “time is the friend of the wonderful company, the enemy of the mediocre”? In other words, are social screens superior to traditional stock picking when assessing risk-expected return relationship? To answer this question the value creation ability of companies considered as socially responsible was examined and compared to any other companies from American stock markets.

Since there is a positive relation between a company's profitability and its valuation, a sustained increase in Economic Value Added (EVA) should result in growing shareholder return. Therefore companies that achieve significantly higher rates of returns should be preferred by investors on the capital market. Any statistically important financial outperformance of positively screened companies (i.e. from the rankings and indices comprised of most sustainable companies) will lead to the conclusion that social screens provide a decent increase of performance. It's based on the simple assumption that if a company decides to act responsibly it may lower its profits at the beginning, but it will probably also raise awareness of it being ethical which leads to improvement in revenues or at least makes them more steady over time. That gives more confidence in running a business and planning the future growth of the company (i.e. by investments with a positive Net Present Value). It also makes the company more credible allowing it to finance its business with a lower cost, which leads to increase in present value of Cash Flows to Firm and the company's value. Taking it all together, considering social and environmental issues may lead to better long-run financial performance. Based on that conclusion we can now extend the SRI definition.

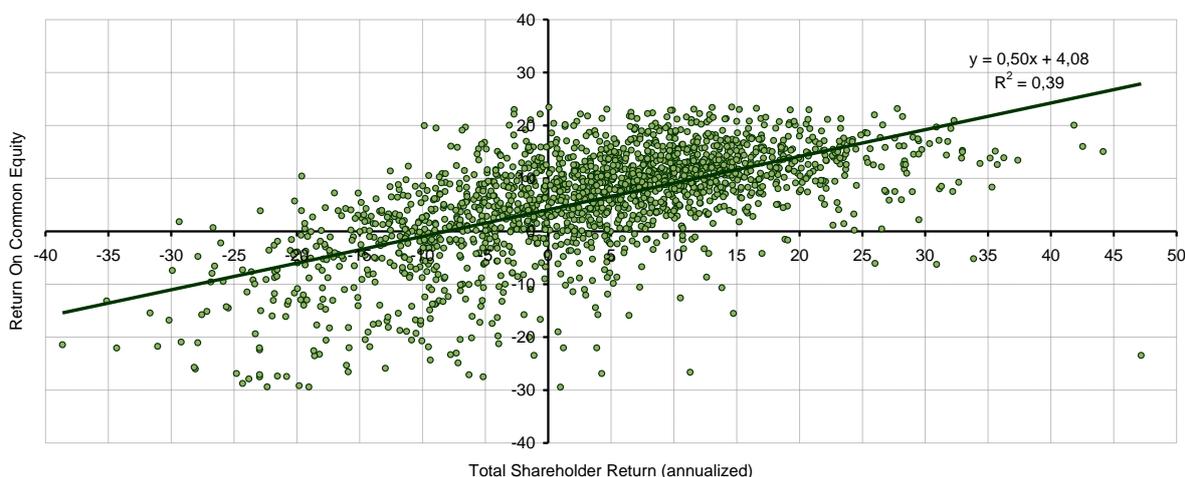
In the extended definition of Socially Responsible Investing, the investor selects companies that have established good relations with their employees and community, and are able to

respond effectively to traditional business challenges. The SRI screens discover firms that are strong financially and manage their liabilities and risk well.

Responsibility leads to shareholders' gains

The following section reveals a link between social responsibility and the market performance of companies from American stock markets. To confirm this belief, there are some assumptions that should be met. One of them says that financially strong companies, that are able to generate higher cash flows, give favorable risk-expected return relation. To meet this assumption the relationship between average rate of return on common equity (ROE) and annualized total shareholder return (TSR) was examined (see chart 3). All American stocks quoted on NYSE, NASDAQ and AMEX were analysed, and the ten-year period counting back from 2009 was considered. Because of leptokurtic distributions of ROE, the 5 percent trimmed mean was utilized. Such an approach helps to minimize the influence of outlying data by discarding a given percentage of probability distribution (the smallest and the largest scores).

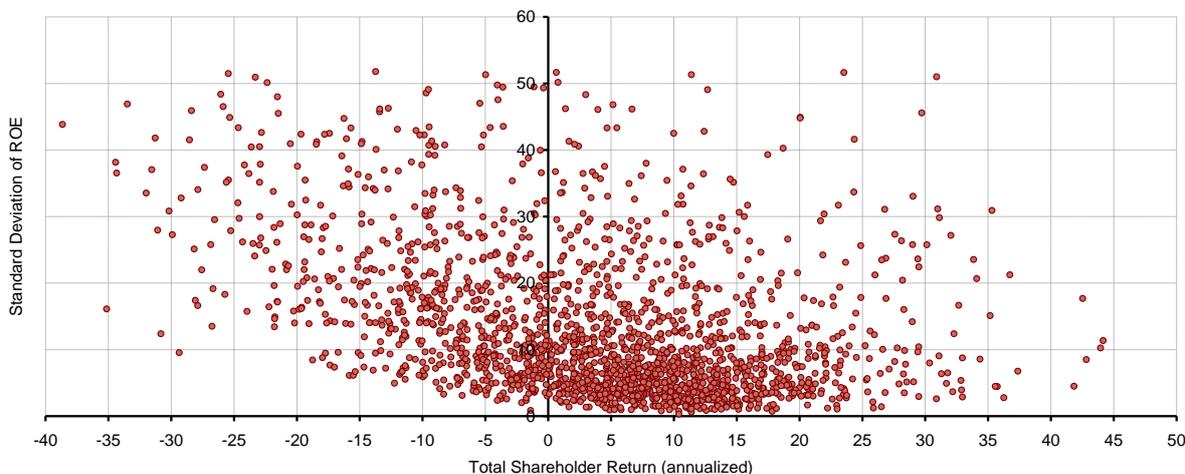
Chart 3: Relationship between the annualized TSR and the average ROE of all individual stocks from American market



Source: Bloomberg, own calculations

The obtained results show that there is a strong linear correlation (+0.622) between long-term average ROE of a particular stock and its annualized TSR. What is more, the trend line crosses with the Y-axis at the +4.08 point that can be considered as a minimum acceptable rate of return from equity over the period being analysed. The positive slope leads to a conclusion that companies with higher ROE deliver its owners better long-term returns. Moreover, as it can be seen in chart 4, there is a link between stability of ROE of individual stock and its market performance measured as annualized TSR.

Chart 4: Relationship between the annualized TSR and the standard deviation of ROE of all individual stocks from American market



Source: Bloomberg, own calculations

Knowing that, it is essential to examine if sustainable companies achieve superior profitability, compared to other companies listed on American market. To find out how sustainable companies outperform financially the broader market, a test for difference of population means was conducted. As there is a small group of American stock forming the 2005 Global 100 list (twenty entities), and two population variances are assumed to be different, the t statistic was calculated as follows:

$$t_{(\alpha, N)} = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2 + s_2^2}{N_1 + N_2}}}, \quad (1)$$

where \bar{X}_1 = the sample mean of the Global 100 US list,
 \bar{X}_2 = the sample mean of the other stocks from the American market,
 s_1^2 = the sample variance of the Global 100 US list,
 s_2^2 = the sample variance of the other stocks from the American market,
 N_1 = the number of U.S. companies from Global 100 list,
 N_2 = the number of other U.S. companies from the American market,
 N = the approximation for the effective degrees of freedom
 α = the significance level.

The hypothesis is that:

$$H_0 : \mu_1 = \mu_2$$

$$H_1 : \mu_1 > \mu_2$$

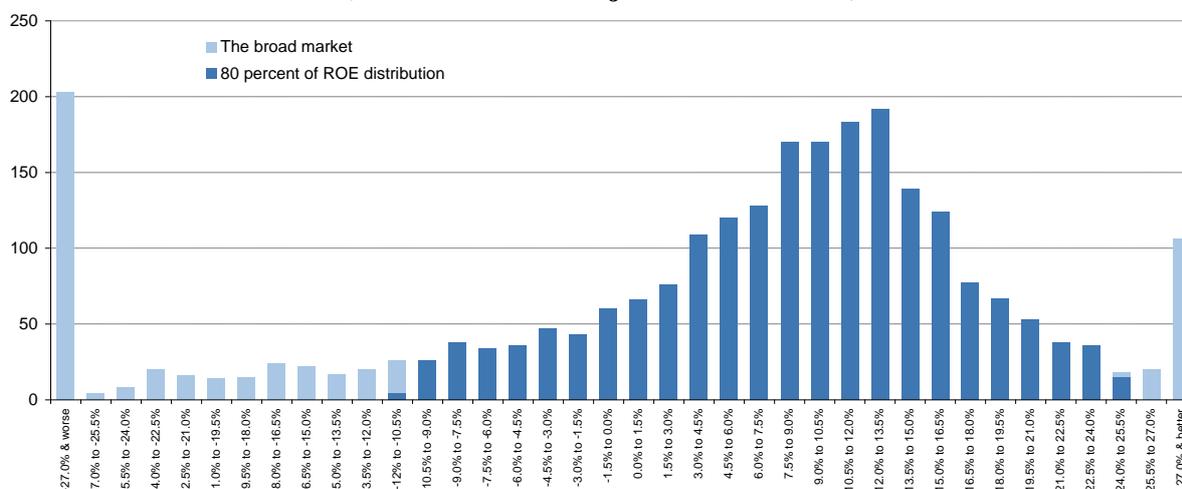
To ensure transparency regarding the selection process of sustainable companies, it was decided to use the Global 100 list as the criteria of social responsibility. The aim of the Global 100 Index is to highlight the global corporations which have been most proactive in managing environmental, social and governance (ESG) issues. The ranking is based on ten equally-weighted factors: environment, social, and governance (ESG) Key Performance Indicators (KPIs) and a Transparency Indicator. The KPIs were developed by Corporate Knights Research Group (CKRG), a signatory to the United National Principles for Responsible Investment (UNPRI), with support from Inflection Point Capital Management, and input from the Global 100 Council of Experts comprised of thought leaders at the interface of sustainability and finance. The KPIs were used to rank companies within industries. The top-ranked companies in each sector, paying attention to weightings of the MSCI ACWI, comprise the final Global 100. (www.global100.org)

To obtain credible findings the fifteen-year period of analyse was divided into three five-year sub-periods (I – from 1995 to 1999, II – from 2000 to 2004, III – from 2005 to 2009) and the 2005 Global 100 list was used. The reasons for such a procedure were to find out:

- 1) how integration of ESG factors influence the companies' profitability in consecutive periods of time,
- 2) if inclusion in the Global 100 index affects the level of a company's financial ratios in any significant way.

As the earlier rejection of outliers did not eliminate the left tail of ROE distribution further reduction was necessary. To get rid of these observations that affect the average considerably, attracting its level to the outliers, and pulling back from the average calculated for the remaining observations, another 10 percent of companies with questionable financial standing were dismissed (chart 4).

Chart 4: Distribution of average ROE of all individual stocks from American market (before and after rejection of outliers)



Source: Bloomberg, own calculations

Three different financial ratios were tested:

- 1) Return On Assets based on bottom EPS – is calculated as trailing twelve month Net Income (Losses), divided by Average Total Assets, times 100,
- 2) Return on Common Equity – is calculated as trailing twelve month Net Income (Losses) minus trailing twelve month Cash Preferred Dividends, divided by Average of Total Common Equity, times 100,
- 3) Return On Invested Capital – indicates how effectively a company uses the sources of capital (equity and debt) invested in its operations. It is computed as trailing twelve month Net operating profit after tax, divided by Average of invested capital, times 100.

Average is the average of the beginning balance and ending balance. ROIC was not computed if the year-over-year average of invested capital was negative.

Table 1: Comparison of profitability ratios of all publicly traded U.S. companies for the 1995-2009 period

		ROA on bottom EPS			Return On Common Equity			Return On Invested Capital		
$t_0 = 2005$		average	std. dev.	p-value	average	std. dev.	p-value	average	std. dev.	p-value
t - 10	Global 100	8,42	5,59	0,020	21,43	9,06	0,001	14,66	8,46	0,034
(1995-99)	broad market	5,14	4,33		12,94	6,43		10,16	4,55	
t - 5	Global 100	5,69	4,85	0,007	17,09	12,80	0,005	11,30	7,21	0,076
(2000-04)	broad market	2,67	4,75		8,73	7,59		8,47	4,30	
t + 5	Global 100	6,91	5,51	0,004	18,41	10,67	0,000	13,48	6,15	0,027
(2005-09)	broad market	3,17	4,78		8,31	8,72		9,97	5,41	

Source: Bloomberg, own calculations

A cross-industry comparison based on ROA was not possible to carry out due to the small sample of companies within each industry. While it is recommended to use ROA to compare companies in the same sector, ROE can be fairly used in comparison across all companies. The average ROE was superior for sustainability-driven companies in each period of time. Only p-value for the average ROIC in 2000-2004 was slightly higher, due to a greater standard deviation. What is more, during the period of the financial crisis, all measures of performance were even higher than in a time of global prosperity. For example the average ROE of companies in the Global 100 Index was 18.41 percent against 8.31 percent for the entire market. This is strong evidence that SRI screens help to discover companies with strong finances and effective management, that are able to maintain the profitability of their businesses even in bear phases of the market.

Table 2: Comparison of profitability ratios of publicly traded U.S. companies included or excluded from 2006 Global 100 list

		ROA on bottom EPS			Return On Common Equity			Return On Invested Capital		
$t_0 = 2006$		average	std. dev.	p-value	average	std. dev.	p-value	average	std. dev.	p-value
t - 10	In	11,09	5,09	0,323	26,64	9,10	0,438	15,57	7,45	0,425
(1996-00)	Out	9,49	6,23		27,66	12,26		16,63	10,25	
t - 5	In	10,64	5,59	0,153	22,82	6,56	0,456	15,44	7,64	0,332
(2001-05)	Out	7,15	4,28		23,50	13,22		13,27	7,63	
t + 4	In	8,37	7,03	0,388	18,42	11,68	0,481	22,30	2,06	0,081
(2006-09)	Out	7,09	6,17		18,83	14,67		15,18	6,54	
the effect of inclusion / exclusion from Global 100 list ($t_0 = 2006$)										
$t_0 = 2006$		average	std. dev.	p-value	average	std. dev.	p-value	average	std. dev.	p-value
In	t - 5	10,64	5,59	0,317	22,82	6,56	0,274	15,44	7,64	0,103
	t + 4	8,37	7,03		18,42	11,68		22,30	2,06	
Out	t - 5	7,15	4,28	0,491	23,50	13,22	0,277	13,27	7,63	0,337
	t + 4	7,09	6,17		18,83	14,67		15,18	6,54	

Source: Bloomberg, own calculations

There are interesting conclusions from the table 2 that compares the profitability ratios of American companies included (In) or excluded (Out) from the Global 100 list in year 2006. What is worth emphasizing is that the new members of the Global 100 index had not only met the criteria of sustainable selection but also presented higher returns on assets, equity and invested capital compared to companies removed from the list. Although those differences are not statistically important, all of those figures were in top deciles of each category in performance. The effect of inclusion / exclusion from Global 100 on the level of company's financial ratios was not observed, that means the profitability of excluded companies does not get worse significantly or at all.

Explaining the financial outperformance of companies committed to corporate social responsibility practices, the following ratios were examined:

- 1) Operating Margin – is computed as trailing twelve month Net Income (Losses), divided by trailing twelve month sales, times 100,

- 2) EBITDA Margin – is calculated as trailing twelve month EBITDA divided by trailing twelve month sales, times 100.

Table 3: Comparison of companies' margins and dividend yields of all publicly traded U.S. companies over the 1995-2009 period

		Operating margin			EBITDA margin			Dividend Yield		
		average	std. dev.	p-value	average	std. dev.	p-value	average	std. dev.	p-value
t₀ = 2005										
t - 10	Global 100	17,72	8,76	0,065	24,68	11,19	0,003	2,07	0,89	0,077
(1995-99)	broad market	14,41	10,82		15,83	9,96		1,74	1,60	
t - 5	Global 100	14,73	9,64	0,236	21,65	10,60	0,008	2,28	1,28	0,000
(2000-04)	broad market	13,09	12,35		14,89	11,44		0,93	1,32	
t + 5	Global 100	13,80	7,19	0,205	19,73	8,97	0,050	2,63	1,65	0,001
(2005-09)	broad market	12,44	10,60		16,12	11,90		1,31	1,78	

Source: Bloomberg, own calculations

Although different industries have different cost structures, this comparison shows that the average Operating Margin of companies in the Global 100 Index was higher than for the whole market, which indicates their superior pricing strategy and operating efficiency, the difference wasn't statistically important. Otherwise, for average EBITDA Margin, that was significantly higher in each period in the last 15 years. The third part of table 3 presents the average dividend yield of American members of the Global 100 list. For the last 5 years the average Dividend Yield of companies in the Global 100 Index was 2.63 percent against 1.31 percent for the entire market, and was comparable with the T-Bill Rate of 2.85 percent. What is worth emphasizing is that the difference is widening over time, and currently amounts to 1.32 percentage point. That should focus the attention of long-term investors, particularly mutual and pension funds managers.

Finally we came to chart 5 that gives more tangible evidence that social screens prevent long-term investors from spectacular loss in portfolio value. It compares the performance of the S&P500 and KLD400 indices to total shareholder return of portfolio of all American stocks from Global 100 ranking for 2005 (Global 100 US portfolio). Keeping the winners pays off!

Chart 5: Comparison of Global 100 US portfolio's total shareholder return with the performance S&P500 and KLD400 indices over the five-year period



Source: Bloomberg, own calculations

Conclusions

There are two basic conclusions of this research. First of all, the review of literature shows that either there is a strong tendency to emphasize the social dimension of SRI, or the way of presenting the outperformance of SRI over non-SRI approach is not the true apples-to-apples comparison. The second finding is that sustainable companies achieve superior profitability, in comparison to other companies listed on the American market, due to higher and steady margins. While it is recommended to use ROA to compare companies in the same industry, ROE can be fairly used in comparison across all companies. That is why the financial analysis of responsible companies from other SRI rankings can be the area which deserves further research, especially the comparison of companies within the core sectors like energy or financial sectors.

In conclusion, the results of this research are of interest to investors that wish to benefit financially from investing in a responsible manner. By adopting the best-in-class method in portfolio selection, investors can benefit from investing in the most sustainable corporations as they are beating the broad market over the long period of time. What is worth emphasizing, over the last five years the companies considered as responsible delivered dividend yields comparable to the T-Bill Rate. This should give a good starting point for the application of social screens in stock picking particularly by mutual and pension funds managers and encourage individual investors to add the ethical dimension to their risk/return analysis.

References

- The American Cancer Society & World Lung Foundation. (2009). *The Tobacco Atlas, Third Edition*. Retrieved from <http://www.tobaccoatlas.org/>
- Camejo, P. (2002). *The SRI Advantage: Why Socially Responsible Investing Has Outperformed Financially*. New Society Publishers.

- Guyatt, D. (2005). Meeting Objectives and Resisting Conventions: A Focus on Institutional Investors and Long-Term Responsible Investing. *Corporate Governance: An International Review*, 5(3).
- Luc Renneboog, Jenke ter Horst, Chendi Zhang. (2007). The Price of Ethics: Evidence from Socially Responsible Mutual Funds. Retrieved from SSRN eLibrary.
- Vigeo Rating. (2010 June 22). *Vigeo downgrades BP plc's ratings*. Retrieved from <http://www.vigeo.com/>
- Olaf Weber, Marco Mansfeld & Eric Schirrmann. (2010). The Financial Performance of SRI Funds between 2002 and 2009. Retrieved from SSRN eLibrary.