The Financial Performance of SRI Excluded Firms Thomas Berry and Joan Junkus

Abstract:

Socially Responsible Investments (SRI) can be characterized as 'negative screening': investors eliminate certain firms from consideration based not on perceived performance but on inappropriate behavior (labor issues or support of same sex unions for example) or for products considered inappropriate for society (alcohol and tobacco for example). There have been a large number of studies examining the effect of this negative filter on investment performance, but little research on the operational impact on a firm of being systematically excluded by SRI investors. This paper examines what financial consequences, if any, occur if a firm is excluded by a large number of SRI funds. We find that debt ratios, profit margins, operating costs, and cash positions of SRI-excluded firms are affected. These excluded firms tend to use more debt, hold higher cash positions, and have higher profit margins and lower operating costs than similar, non-excluded firms.

I. Introduction:

Socially Responsible Investing (hereafter SRI) is an area of increasing interest in the investment community. While the SRI concept has been traced to the early 1900's (Sauer 1997), the largest growth appears to have occurred in the 1990's with these funds reaching about \$2 trillion (Stone 2000). As of 2005, approximately 10% of new investment dollars were committed to SRI funds. Very broadly, SRIs can be characterized as 'negative screening', i.e. investors eliminate certain firms from consideration based not on perceived performance but on inappropriate behavior (labor issues or support of same sex unions for example) or for products considered inappropriate for society (alcohol and tobacco for example). The most common of these negative filters are alcohol, tobacco, and gambling, but the restrictions run a wide gamut including: labor relations, adult entertainment, animal testing, bio-ethics, diversity, human rights, military, environmental issues, etc.¹

There have been a large number of studies which have examined the effect of this negative filter on investment performance. There is little research, however, on the impact on a firm of being systematically excluded. If a firm is excluded by a large number of SRI funds, what are the financial or operational consequences, if any? Perhaps the market is large enough or unconcerned enough that there is no impact on excluded firms, or perhaps these firms have a risk premium for these perceived socially inappropriate behaviors and products. Our study will examine these questions.

We begin by examining the financial characteristics of SRI-excluded firms relative to a portfolio of comparable firms over a twelve year period (1995-2006). We restrict our selection of excluded firms to those involving the most common categories of

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¹ Some funds consider themselves 'inclusionary" by including firms that meet certain socially acceptable criteria, but the effect is the same.

perceived socially inappropriate behavior; alcohol, tobacco, and gambling. We compare a portfolios of firms from these narrowly defined industries with a portfolio containing firms from a broader industry category (for tobacco, food; for alcohol, beverages, and for gambling, hotels). The specific restricted firms examined are those included in the SINdex, a traded index which includes firms in the alcohol, tobacco, and gambling industries. The SIN-dex is a traded index with firms specifically chosen to be 'anti-SRI' hence we felt this would be a representative group for our purpose.

The focus of the vast majority of empirical work on SRI firms is on stock valuation and SRI investment performance. The results overall are mixed. While a metaanalysis of SRI investment results finds that there is a positive relation between individual firm financial performance and SRI characteristics (Orlitzky, Schmidt, and Rynes 2003), SRI mutual funds—those that use SRI characteristics to screen stocks and construct optimal portfolios--do not appear to perform differently than non-SRI funds (nor do they out- or underperform the market (see Bollen 2007)). SRI indexes—averages of companies highly rated along some dimension of SR (environmental, human rights, etc.)—have been shown to outperform the S&P500, but not in every sub-period (Statman 2006).

Very few studies have addressed the linkage between firm characteristics and SRI measurements. Murphy and Verschoor (2002) summarize a <u>Business Week</u> study that found that the top 100 ethical firms (chosen by <u>Business Ethics</u> magazine) had higher short-term sales and profit growth and higher profit margins than the remaining S&P500 firms. While Spicer (1978) found that US pulp and paper firms with better pollution control records had higher profitability, these results were not replicated in a study by Chen and Metcalf (1980). Hong and Kacperczyk (2007) find that leverage is significantly higher for a broadly defined set of 'sin' companies than for other publicly traded US firms, but other financing-related firm characteristics are not significantly different. But event studies clearly show that news concerning a firm's environmental policies is incorporated into its stock valuation (see Derwall, Guenster, Bauer and Koedijk 2005), indicating that SR behavior can have an effect on market perceptions.

II. Methodology and Data:

One difficulty with testing issues related to SRI behavior relates to the vast array of definitions of SRI behavior (see Hemley, Morris and Gilde 2005 and Statman 2005). The definition of 'socially responsible' firms and actions is a very broad one, and can include such issues as products (nuclear weapons, alcohol), the production process (pollution, labor practices), choice of suppliers (sustainable agricultural production), and a vast array of other issues (apartheid, bribery, tax evasion, shareholder activism, nature conservancy). In addition, investors can choose simply to exclude non-SRI firms from their portfolio, actively invest in firms with positive SRI policies (Ben and Jerry's), or seek to use their shareholder status to force a change in firm behavior (e.g., blocking animal testing at cosmetics companies, or forcing divestment in Burma). There is also a multiplicity of SRI agencies to score a company's SRI rating (for US stocks, KLD Research and Analytics (developer of the Domini 400 Social Index), Dow Jones Sustainability Group; for European securities, Ares, NPI Social Index for the UK, etc.). For maximum clarity, we focus on a narrow, clear, and generally well accepted set of

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companies, namely alcohol, tobacco, and gambling; a triad of industries that form the basis of the International Securities Exchange's SIN-dex (http://www.iseoptions.com/), an index of thirty firms in these industries. These industries figure prominently in contrarian vice-investment literature (Ahrens 2004 and Wexler 2004). The Social Investment Forum lists 106 SRI mutual funds and the various factors that compose them. Of the 106 funds, 89 ban tobacco firms, 76 ban alcohol firms, and 72 ban gambling firms. The next highest category for funds is the banning of military related firms which was 36 funds. Hong and Kacperczyk (2006) have found that institutional investors hold these particular types of non-SRI companies in smaller proportions than their market weight.

Our interest is in contrasting firms typically excluded or restricted from SRI portfolios relative to similar non-restricted firms. Our sample of restricted firms consists of the 30 firms comprising the SIN-dex, which contains 15 gambling firms, 9 tobacco firms, and 6 alcohol firms. The firms included in the index are listed in Table I. For the SIN-dex firms we collected quarterly balance sheet and income statement data for each firm over the period 1995-2006 and constructed portfolios for each group.

For comparison portfolios we used the largest industry which contained the SRIexcluded firms as a subgroup. For example, the tobacco firms are contained in the food industry, alcohol in the beverage industry, and gambling in the hotel industry (the majority of revenue in gambling comes from resort/hotel venues). We constructed the comparison industry portfolios by deleting the SIN-dex firms (plus any others from the tobacco, alcohol or gambling industry) from each broad industry group and then computing the industry average data for each industry, again on a quarterly basis for the period 1995-2006. All data is from Compustat.

III. Results:

How are corporate characteristics affected by SRI concerns? Three avenues of influence are possible. First, if investors in sufficient numbers limit purchases of stock in 'sin' companies, then a firm's SRI behavior will be felt in those areas related to this inability to attract equity investment. (See Heinkel, Kraus, Zechner 2001 for a model that indicates that a reasonable threshold for investor ability to affect corporate performance is 20%.) Thus, if equity financing is hard to come by, sin companies should have higher leverage ratios (D/TA). If financing is difficult for these firms, they can be expected to hold higher levels of cash and securities (as a percentage of total assets).

A second avenue for SRI effects on firm characteristics is through firms' cost structures. In very general terms, non-SRI (sin) firms have fewer restrictions on their actions, and so correspondingly lower costs. However, we are focusing exclusively on three particular 'sin' industries, and so address specific cost components that would be affected by the peculiarities of these sin industries. Since 'sin sells', one would expect that sin companies would need to spend less as a percentage of sales revenue on advertising their product. On the other hand, with the continuing threat of legal and regulatory action against their products, sin companies would be expected to have much higher legal expenses. To examine the impact on cost structure, we compare operating expenses (as a percentage of sales). In addition, sin companies may choose to keep more

cash on hand in order to cover these expenses, so again they would be expected to have higher cash and marketable securities than comparable firms.

A third avenue of influence relates to firm profitability. Since a sin product can be expected to have a relatively low price elasticity, a sin company should have a relatively high profit margin. In addition, spending on these kinds of products should be less affected by recessionary pressures, and so profit margins should remain unaffected by economic cycles compared to comparable firms.

We test these hypotheses by calculating the average debt, cash and marketable securities balances, operating expenses, and net income for both our 'sin' portfolios and the comparable industries. Both debt and cash are normalized by total assets and expenses and net income are normalized by sales. Due to the fluctuating nature of these accounts we took averages over the entire time series allowing for forty-eight observations for each porfolio. The results of these overall 12-year average comparisons are given in Table II. All the variables show the hypothesized direction with the exception of the debt ratio for alcohol firms.

As to the behavior of profit margins over time, the time series of the data supports our general hypothesis (see Charts 1, 2, and 3). The 'sin' companies have higher profit margins on average and appear to be less sensitive to the economic downturns of the late 1990's and the 2001-2 period, but more data is required to confirm these trends.

IV. Conclusions:

Since some firms are considered socially undesirable, they are systematically excluded from a growing number of funds. These 'sin' firms are examined to see if they possess financial characteristics which would be consistent with firms in this situation. In particular we examine the debt ratios, profit margins, operating costs, and cash positions of these firms. Our hypotheses are widely supported and show that there is an impact which is detectable, namely that these firms tend to use more debt, hold higher cash positions, have higher profit margins, and lower operating costs than otherwise similar firms.

There remain a number of questions for future research. We suspect that one reason for the higher profit margins is that the 'sin' firms are less vulnerable to business downturns and thus are better able to weather downturns in the business cycle. While there are no official recessions during the time period we examined there is some evidence that the 'sin' firms performed better during down markets. This question needs further analysis. In addition there are questions of corporate governance and executive compensation that can be addressed. For instance, sin firms might be expected to pay proportionately higher compensation in order to attract managerial talent to what might be considered a 'shunned' industry. As the popularity of SRI funds grows, these and other important questions will prove to be important areas of inquiry.

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Table I: Firms included in the SIN-dex

Symbol	Name			
ABV UN	AmBev -PN (ADR)			
AOI	Alliance One International Inc.			
ASCA	Ameristar Casinos			
BF.B	Brown-Forman Corp.			
BTI UA	British American Tobacco (ADR)			
BUD	Symbol			
BYD	Boyd Gaming Corp.			
BYI	Bally Technologies Inc			
CEDC	Central European Distribution			
CG	Loews Corp Carolina Group			
DEO UN	Diageo (ADR)			
IGT	International Game Technology			
ISLE	Isle of Capri Casinos Inc			
LVS	Las Vegas Sands			
MCRI	Monarch Casino & Resort			
MGM	MGM Mirage			
MO	Altria Group, Inc.			
MPEL	Melco PBL Entertainment Macau Ltd.			
PENN	Penn National Gaming Inc			
PNK	Pinnacle Entertainment			
RAI	Reynolds American Inc.			
SGMS	Scientific Games			
SHFL	Shuffle Master			
STZ	Constellation Brands			
TAP	Molson Coors Brewing Company			
UST	UST Inc.			
UVV	Universal Corp.			
VGR	Vector Group			
WMS	WMS Industries			
WYNN	Wynn Resorts Ltd			

Table II

Means for selected financial characteristics for 'sin' portfolios and the Industry Comparables for the period 1995-2006

	Debt	Cash and Securities	Operating Expenses	Net Income
Alcohol	.391	.128	.820	.077*
N = 6				
Beverages	.407	.0961	.882	.035
N = 12				
Tobacco	.699*	.219*	.804*	.091*
N = 9				
Food	.318	.125	.864	01
N = 56				
Gambling	.621*	.149	.769*	.056*
N = 15				
Hotel	.544	.124	.842	.017
N = 17				

* = Significantly different at the 5% level



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References

Ahrens, D. (2004). <u>Investing in Vice: The Recession–Proof Portfolio of Booze, Bets,</u> <u>Bombs and Butts</u>. New York: St. Martin's Press.

Bollen, Nicolas P. B. (2007). "Mutual Fund Attributes and Investor Behavior", <u>Journal</u> of Financial and Quantitative Analysis 42: 683-708.

Chen, Kung H. and Richard W. Metcalf (1980). "The Relationship between Pollution Control Record and Financial Indicators Revisited". <u>Accounting Review</u> 55:168-177.

Derwall, Jeroen, Nadja Guenster, Rob Bauer, and Kees Koedijk (2005). "The EcoEfficiency Premium Puzzle". <u>Financial Analysts Journal</u> 61:51-64.

Heinkel, Robert, Alan Kraus, and Josef Zechner (2001). "The Effect of Green Investment on Corporate Behavior". Journal of Financial and Quantitative Finance 36:431-449.

Hemley, David, Donald Moris, and Christian Gilde (2005). "Antisocially Conscious Sectors: A Benchmark for Socially Conscious Investing", <u>The Journal of Investing</u> 14:78-81.

Hong, Harrison, and Marcin Kacperczk (2006). The Price of Sin: The Effects of Social Normal on Markets". Princeton University Working Paper (http://papers.ssrn.com/sol3/papers.sfm?abstract_id=766465).

Murphy, Elizabeth and Curt Verschoor (2002). "Best Corporate Citizens have better Financial Performance". <u>Strategic Finance</u> 83:20-22.

Orlitzky, Marc, Frank L. Schmidt, and Sara L. Rynes (2003). "Corporate Social and Financial Performance: A Meta-Analysis". <u>Organization Studies</u> 24:403-441.

Spicer, Barry H. (1978). "Investors, Corporate Social performance and Information Disclosure: An Empirical Study". <u>Accounting Review</u> 53:94-111.

Statman, Meir (2005). The Religions of Social Responsibility", <u>The Journal of Investing</u> 14:14-23.

Statman, Meir (2006). "Socially Responsible Indexes", <u>The Journal of Portfolio</u> <u>Management</u> 32:100-109.

Wexler, C. (2004). <u>Stocking up on Sin: How to Crush the Market with Vice-Based</u> <u>Investing</u>. Hoboken: Wiley.