INTRODUCTION
Investing is a goal-directed activity. Most investors seek to satisfy multiple economic goals such as maximizing return on investment (ROI), saving for retirement and increasing personal wealth, among others. An emerging breed of socially responsible (henceforth SR) investors also embrace a number of social goals, including protecting the environment, advancing social causes and agendas and censuring socially irresponsible firms. In light of these multiple and often conflicting aspirations, there are bound to be differences in importance given to various investing objectives. We highlight differences in individual values and attitudes and relate them to investors’ economic investing goals (EIG) and social investing goals (SIG). In this study, we specifically model the interdependence of EIG and SIG to provide a richer description of the investing process. Finally, we identify new research prospects and discuss the managerial implications of our findings.
INVESTING AS CONSUMPTION

We study investing from a consumption perspective to shed light on the motives and goals that underlie investing behavior. Extant research in finance comparing the performance of SR mutual funds to their ‘regular’ counterparts is useful only to develop benchmarks and comparisons. Even recent developments in behavioral finance have focused on investments – by clarifying the effects of biases in investor decisions to explain market anomalies such as arbitrage and mis-priced assets. Not much is known about investors, that is, who buys these products. Further, the focus on the investment has drawn attention away from the act of investing, thereby concealing important sources of explanation, that is, why do investors buy these products. In other words, very little is known about the customers and their motivations. This lacuna has prompted some to express surprise that ‘consumer research has paid so little attention to consumers’ investment decisions’. Yet others have argued that investor behavior is essentially ‘consumer behavior for a particular, and particularly important, product category’. To get answers to these important questions, we surveyed 348 investors. Our primary focus is to explain the relationships between individual difference variables and investors’ SIG and EIG.

There is a long-standing view that a firm’s responsibility is like a pyramid starting from basic economic responsibilities, moving up to the legal and ethical responsibilities, with discretionary responsibilities being the topmost. This model is equally applicable to consumer investing behaviors. We propose that people have different investing goals – economic and social – when choosing a fund, which will be differentially weighted. The relative emphasis placed on these goals will likely vary between different categories of investors. In particular, we expect SR investors to be more influenced by their moral and ethical beliefs, and share values that are different from average investors. We also expect that a host of other values and beliefs including environmental attitude (EA), social investing efficacy (SIE), religiosity, materialism and protected values (PV) will influence their investing goals.

Investing goals

Individuals have goals, although fuzzy, when choosing a mutual fund. In the broadest sense, goals have been described to include maximizing gains and minimizing losses. Such a broad dichotomy is not very useful because the dimensions on which gains and losses are measured are not specified. In this paper, we consider two dimensions for these goals – economic and social. Economic goals most often cited by investors include maximizing returns, increasing financial wealth, achieving returns relative to standard benchmarks and personal satisfaction. Investors who give greater importance to the above-mentioned goals are referred to as Economically Responsible (henceforth ER) in contrast to others who will be referred to as non-ER investors. ER investors tend to have three important goals: (1) to boycott firms deemed socially irresponsible; (2) to promote environmental causes; and (3) to advance social agendas, whereas non-SR investors do not subscribe to these three goals. SR investors tend to boycott socially irresponsible companies; this is usually determined on the basis of personal moral philosophy and ethical...
principles. Although not likely to influence company conduct or affect stock prices,\textsuperscript{9,10} this satisfies investors’ needs for consistency between personal values and investing behavior.\textsuperscript{11} Also, investors are more likely to punish firms for irresponsible conduct, as negative information generally has a greater psychological impact. This explains the wide proliferation of negative screens in the SR investor community. Environmental protection remains a top priority for SR investors.\textsuperscript{12} In response to this concern, firms have adopted triple bottom line accounting approaches to report the economic, social and environmental impacts of their business operations. Finally, SR investors aim to advance social agendas. Although individual edicts vary, most can be expected to favor progressive corporate practices in regard to corporate governance, employment and community development. Advancing social agendas implies greater proactiveness, including attempts to engage and influence companies through shareholder resolutions, e-mail campaigns and annual-meeting protests.

Previous research has focused on economic or SIG in isolation, ignoring the potential for each to influence the other. Researchers have speculated that some investors might be willing to sacrifice economic gains to achieve social gains (p. 21).\textsuperscript{5,7} Beal, Goyen and Phillips (p. 76)\textsuperscript{7} suggest that SR investing provides psychic benefits that may compensate for loss of returns. On the other hand, some researchers have suggested that investors would do well to focus on SIG, as SR funds tend to outperform standard benchmarks.\textsuperscript{13} This mixed evidence leads us to suggest the following non-recursive relationship between EIG and SIG:

**Hypothesis 1a:** Economic investing goals will influence social investing goals.

**Hypothesis 1b:** Social investing goals will influence economic investing goals.

### VALUES AND ATTITUDES THAT INFLUENCE EIG AND SIG

Calls for research to link consumer values and dispositions to SR investing\textsuperscript{14} have largely been unattended. Based upon previous qualitative work consisting of depth interviews with investors, we identified the following constructs to distinguish between SR and ER investors: EA, religiosity, materialism, PV and SIE. In order to study the differential influence of these antecedents, we divide investors into groups based on the relative importance attached to EIG and SIG as follows: high versus low ER and high versus low SR investors.

#### Environmental attitude

Carson’s\textsuperscript{15} eye-opening description of the enormous impact of human activities on the natural environment persuaded a number of people to modify their own consumption behaviors. ‘EA’ is shaped by beliefs about the interaction between an individual and the natural environment. It motivates behaviors such as purchasing environmentally friendly products,\textsuperscript{16} buying from food cooperatives\textsuperscript{17} and recycling.\textsuperscript{18} Henion\textsuperscript{19} defined one ‘whose values, attitudes, intentions or behaviors exhibit and reflect a relatively consistent and conscious concern for the environmental consequences related to the purchase, ownership, use or disposal of particular products or services’ as an *ecologically concerned consumer*. For the next two or three decades, even as this burgeoning segment grew in size and importance, most research was premised on the assumption that these consumers would react favorably to environmentally friendly products and services. In other words, it was presumed that businesses would seize opportunities to serve this segment by developing appropriate offerings. Only recently have researchers recognized that many in this segment are more proactive and ready to accept responsibility for their personal actions.\textsuperscript{20} Kashyap et al\textsuperscript{20} proposed the concept of *individual*
environmen\textit{tal responsibility}, one that shifts the focus from concern and reactivity to responsibility and proact\textit{ivity}. Thus, environmentally responsible consumers do not merely wait for new environmentally friendly offerings to be made available to them, they proactively engage businesses. Investing in funds that steer money away from certain businesses and towards others reflects an investor’s deep commitment to the environment – it would be one of the most profound proactive behaviors. Hence, we expect that

\textbf{Hypothesis 2:} Environmental attitudes will have a greater influence on the SIG of SR investors than non-SR investors.

\textbf{Materialism}\n
\textit{Materialism} is defined as the value that governs the role of material possessions in one’s life.\textsuperscript{21,22} Individuals often use their possessions to reflect themselves and their values. As Richins (p. 522)\textsuperscript{22} points out, ‘a man whose most valued possessions are a Bible and his wedding ring differs in many ways from one who cares about his snowmobile and hunting rifles’. People use their material possessions, whether it is the clothes they wear or the car they drive, to express their personal values. Richins\textsuperscript{22} identified three dimensions of materialism: success, centrality and happiness. First, material possessions are often used to signal prestige and success. Materialistically driven investors view investments as vehicles to acquire possessions that can confer desired status. Second, the act of investing increases investor involvement in wealth creation. Thus, investing becomes a core activity and occupies a central role in the lives of materialistic investors. Finally, materialistic investors derive happiness from their quest for material possessions. Their ‘pursuit of happiness’ is inexorably tied to the ability to buy more and better quality products than they can afford at present.

Investing provides an opportunity to pursue this materialistic quest. Therefore, we expect that

\textbf{Hypothesis 3:} Materialism will have a greater influence on the EIG of ER investors than non-ER investors.

\textbf{Religiosity}\n
People allow their religious beliefs to influence a number of behaviors.\textsuperscript{23} \textit{Religiosity} is the degree to which an individual is committed to a set of religious beliefs and the degree to which it influences her/his attitudes and behaviors.\textsuperscript{24} The influence of religiosity on social mores varies from society to society as also from individual to individual. The effects of religiosity generally take the form of disapproval of behaviors that are discouraged and punished, or approval of behaviors that are encouraged and rewarded. It is widely known that consumption of pork is disallowed in the Jewish and Moslem religions as is the consumption of beef in the Hindu religion. On the other hand, most religions encourage charitable giving to the needy and poor. The effects of religiosity pervades across various behaviors, including shopping,\textsuperscript{25} students’ attitudes,\textsuperscript{26} delinquency\textsuperscript{24} and investing.\textsuperscript{27}

Our concern is restricted to understanding whether and how religiosity influences investing decisions and behaviors. The interaction between religiosity and people’s pocket books can be traced to the ancient practice of tithing. In this ‘approved’ behavior, people were encouraged to offer a ‘voluntary’ contribution of an amount roughly equal to 10 per cent of one’s earning to the religious organization. As most religious organizations did not have much revenue generating capability, tithing was encouraged. However, the idea that one’s religious beliefs influence investing decisions is slightly more modern. For instances of that we will have to go back 200 odd years
to the Quakers, who allowed their religious beliefs to govern their investing decisions by refusing to invest in businesses they thought as profiting from war or slavery.\textsuperscript{27} This movement, at least in the United States, gathered momentum in the 1960s that represented the fiery days of civil rights marches, anti-Vietnam protests and disinvestment in South Africa.\textsuperscript{28} Some have suggested that Friedman’s famous dictum in our opening line may have been an attempt to counter the trend of mixing business issues with social responsibility.\textsuperscript{24} In any case, today people freely allow their religiosity to interact with their investing goals and decisions. As a result, we expect investors who emphasize social goals to be influenced by religiosity more than the average investor. We also expect that ER investors will be more likely to be influenced by religious principles that encourage investors to attend to investing decisions and adopt systematic risk to maximize returns.\textsuperscript{29}

**Hypothesis 4:** Religiosity will have a greater influence on the SIG of SR investors than non-SR investors.

**Protected values**

PV have been defined as ‘those that resist trade-offs with other values, particularly economic values.’\textsuperscript{30} For instance, some people believe that no amount of benefit (for example, lower taxes, cheaper gas) can compensate for the possible extinction of animal species in the Alaskan wildlife refuge because of drilling by oil companies. Examples of PV include the sanctity of human lives, the universality of human rights and protection of the natural environment among others. PV pose problems for contingent valuation approaches (that is, use of willingness to accept/pay for social problems/benefits), as they are assigned infinite values by those who hold them. The study of PV is especially important in the present context because of conflicts between economic and social goals for some investors. Note that PV originate from rules that forbid certain types of behaviors rather than from evaluations of likely outcomes. For example, many investors choose to resist investing in tobacco companies regardless of the size of returns. In addition, PV are more readily apparent in acts of commission rather than omission.\textsuperscript{31,32} This suggests that investors are more likely to invoke these values when they perceive that company behavior violates their principles (for example, by marketing products that harm the environment) rather than by their failure to act (for example, by not adopting recycling technologies).

We adapted PV theory to empirically test differences between the investor segments profiled earlier. Specifically, we used the most common screening criteria employed by fund managers to develop a census of inviolable acts, including manufacturing or marketing firearms, alcoholic beverages, environmentally unfriendly products, pornography and tobacco products; operating nuclear power plants, casinos and gambling businesses; and committing tax fraud.

In light of the importance attached to SIG by SR investors, one would expect that PV would have a greater influence on their SIG. More formally, we propose that

**Hypothesis 5:** Protected values will have greater influence on the SIG of SR investors than non-SR investors.

**Social investing efficacy**

In his seminal work on Protection Motivation Theory, Rogers\textsuperscript{33} showed the significance of efficacy in bringing about attitudinal and behavioral changes. The role of efficacy in explaining altruistic behavior,\textsuperscript{34} health-related choices,\textsuperscript{35,36} making and keeping resolutions and environmentally responsible behaviors\textsuperscript{37,38} has been well studied, although results have been ambivalent. Some find that it played a role in health-related choices,\textsuperscript{35} whereas others did not...
Not everybody wants to save the world. The mixed findings could simply be the result of not clearly specifying the domain of the outcome. To ensure that efficacy is specific to our context, we proposed and measured the concept of SIE. ‘SIE’ is the assessment an individual makes of the likelihood that his/her investment will lead to the desired social outcome or at least increase the probability of the desired outcome. It has been shown to be a significant moderator in case of helping behaviors, in general, and charitable giving, in particular.

Perception of high efficacy (I can do something about it) gives people a greater sense of confidence, thus vitiating the need to carefully process any incoming information. Gleicher and Petty call this cognitive reassurance, and suggest that efficacy could produce such a degree of confidence as to make people completely avoid information processing lest they find information that is at odds with their beliefs. Efficacy is also related to a belief about one’s own capabilities to influence an outcome. Thus, while efficacy can increase one’s belief in an action thereby increasing the probability of engaging in that behavior, it could also be harmful to the extent that it may impede a thorough processing of information. All in all, we believe that a domain-specific measure of efficacy (SIE) will have a significant impact, and hence propose that SR investors will have a higher sense of SIE as compared to non-SR investors. Therefore,

Hypothesis 6: Social investing efficacy will have a greater influence on the SIG of SR investors than non-SR investors.

METHOD
We used a direct collection method to gather our sample. Students at two public universities were trained to administer the questionnaire and assigned the responsibility of recruiting investors in two different northeastern states. Each interviewer was required to obtain at least three responses. In all, 81 interviewers collected 348 responses at an average of 4.3 responses per interviewer. We provided student researchers with a set of guidelines to ensure consistency in the data collection process. Each student was instructed to identify eight potential respondents, excluding family, who were responsible for making personal investment decisions. The students initially provided us with lists of respondents, including details of age, occupation and a telephone contact number. These lists were carefully examined to avoid potential duplication and to ensure that no respondent completed more than one survey. Students were instructed to qualify respondents on the basis of years of investing experience and net portfolio value. To be included in the sample, each respondent had to meet two criteria: (1) three years of investing experience and (2) a portfolio worth at least US$5000. A month after the survey was completed, a random sub-sample of 40 respondents (10 per cent of sample) was contacted to reconfirm that the respondents satisfied the eligibility criteria and to ensure the integrity of the data collection process. Although we may have disproportionately sampled the population of investors, this does not unduly bias our findings, as we focus on relationships among variables and are guided by a priori hypotheses.

Our sample consisted of 204 males and 144 females ranging in age from 25 to 88 years, with a median age of 45 years. Nearly 80 per cent had at least a college degree. Seventy-four per cent of them were White, whereas Blacks (8.4 per cent), Hispanics (8.6 per cent) and Asians (9.5) accounted for the remainder. A comparison of sample demographic characteristics with a national profile of investors shows that our sample was consistent in terms of age and investment experience, but reflected the greater racial diversity and higher education and income one would expect in the Northeastern United States. Data were
obtained from the Investment Company Institute’s 2007 Investment Company Factbook.43

We used 7-point Likert scale anchored at ‘Strongly Disagree’ and ‘Strongly Agree’ to measure the constructs of interest. Scales used to measure materialism and religiosity scales were adapted from previous research. The rest were developed for the purpose of this study. Details are provided in the appendix. A three-item scale measured the extent to which investors sought to achieve their social goals through investing choices. This was conceived as a formative scale. Face validity was independently assessed by experts conducting similar types of research. A four-item scale measured the importance given to economic goals (Cronbach’s alpha = 0.69). We categorized the respondents into four segments based on their scores on the economic and social goals measures. Specifically, we parsed the data and eliminated all respondents whose responses fell into the middle tercile of the social or the economic goals categories (n = 151, 43.4 per cent of total sample). This ensured greater contrasts between high and low score respondents. We also conducted an analysis by segmenting the sample based on quartiles, that is, comparisons of the uppermost and lowermost quartiles, and found an identical pattern of results. Then, based upon their score on EIG (that is, low < = 20 or high > = 23) and SIG (that is, low < = 10 or high > = 13), they were assigned to either high or low economic (EIG) or SIG groups. Of the 197 respondents, 89 fell into the high EIG and 108 into the low EIG group. The same subset was also divided on the basis of SIG with 99 respondents in the high SIG and 98 in the low SIG group.

The independent measures of EA, religiosity, materialism and SIE were subjected to reliability analysis, and scale items with low item-to-total correlations were dropped. Next, we estimated two confirmatory factor analysis models to assess construct reliabilities and validities (see Table 1). The first model was used to refine the scales measuring EA, investing efficacy and religiosity (χ² = 123.6, 51 df, P < 0.00, RMSEA = 0.07, CFI = 0.97, AGFI = 0.89). The second CFA model was used to assess the validity of the materialism scale that was adapted from Richin’s short version,22 with success, centrality and happiness as the three dimensions (χ² = 40.7, 11 df, P < 0.0, RMSEA = 0.08, CFI = 0.95, AGFI = 0.95). Both models showed acceptable fit after items that loaded poorly were eliminated. The final models were reliable as evidenced by composite reliabilities ranging from 0.72 to 0.92 and valid as per the Average Variance Extracted measures of 0.50 and higher (pp. 777 – 778).44 Discriminant validity was confirmed by the finding that the variance extracted for each pair of constructs was higher than the squares of the correlations between the constructs. We measured the number of PV by computing respondent scores (Yes = 1 and No = 0) to questions about their intentions to boycott companies that performed any of the controversial behaviors mentioned earlier.

Next, we conducted multigroup path analysis (see Table 2) to contrast the paths from the individual difference variables to the investing goals among high and low SIG groups. We began by estimating an Overall Model (χ² = 45.5, P < 0.03) with the pooled sample in which the individual difference variables were regressed on EIG and SIG. Next, we estimated the Unrestricted Model I in which we allowed coefficients to differ between groups (χ² = 24.5, P < 0.18). Based on significant paths, we pared this model to obtain the Unrestricted Model II. This model had a good fit (χ² = 25.1, P < 0.46). Next, we reduced this model to the Final Mixed Model I by progressively constraining each path coefficient to be equal in both groups and checking for deterioration in model fit. The fit of the Final Mixed Model I was very good (χ² = 26.5, P < 0.49, RMSEA = 0.0,
Not everybody wants to save the world

CFI = 0.99, TLI = 0.98). Next, we used a similar process to study the influence of the antecedent variables on the high and low EIG groups. Note that we constrained the path from SIG to EIG to be equal in both groups as per our finding in the Final Mixed Model I (see Table 2). We allowed the errors of SIG and EIG to correlate as suggested by modification indices. The model showing the differential effects of the antecedents on high and low EIG groups is denoted as Final Mixed Model II. This model had an acceptable fit ($\chi^2 = 123.6 (51 \text{ df}, P < 0.0)$, RMSEA = 0.07, CFI = 0.97, AGFI = 0.89.

Model 2 $\chi^2 = 40.7 (11 \text{ df}, P < 0.0)$, RMSEA = 0.08, CFI = 0.95, AGFI = 0.95.

We limit our discussion to direct effects for the purpose of brevity. We found partial support for Hypothesis 1a and full support for Hypothesis 1b. In the Final Mixed Model I comparing high and low SIG groups, the path from EIG to SIG was not significant in the low SIG group. In the Final Mixed Model II comparing high and low EIG groups, the same path (EIG $\rightarrow$ SIG) was significant ($-0.39, t$-value $=-1.78$) at $P < 0.10$ (two-tailed) in the low EIG group. We found significant paths from SIG to EIG in both groups ($-0.44, t$-value $=-2.97$ in the Final Mixed Model I and $-0.39, t$-value $=-3.27$ in the Final Mixed Model II) and both models. In sum, the findings provide adequate support for the proposed non-recursive relationship. Next, we found no support for the hypothesized differential relationship between EA and SIG (as per Hypothesis 2) In fact, we found that the path from EA $\rightarrow$ SIG was significant ($0.29, t$-value $=2.16$) in the low SIG group. We found that that materialism (M) was

| Table 1: Confirmatory factor analysis with standardized factor loadings, composite reliabilities and average variance extracted |
|---|---|---|---|---|---|
| CFA Model 1 | CFA Model 2 Materialism |
| Environmental attitude | Social investing efficacy | Religiosity | M1 success | M2 happiness | M3 centrality |
| EA1  | 0.84 | — | — | — | — |
| EA2  | 0.64 | — | — | — | — |
| EA3  | 0.70 | — | — | — | — |
| SIE1 | — | 0.81 | — | — | — |
| SIE2 | — | 0.84 | — | — | — |
| SIE3 | — | 0.67 | — | — | — |
| SIE4 | — | 0.77 | — | — | — |
| C1   | — | — | — | — | — |
| C2   | — | — | — | — | — |
| C3   | — | — | — | — | — |
| C4   | — | — | — | — | — |
| R1   | — | — | 0.65 | — | — |
| R2   | — | — | 0.76 | — | — |
| R3   | — | — | 0.91 | — | — |
| R4   | — | — | 0.89 | — | — |
| R5   | — | — | 0.70 | — | — |
| M11  | — | — | — | 0.84 | — |
| M12  | — | — | — | 0.86 | — |
| M13  | — | — | — | 0.68 | — |
| M21  | — | — | — | 0.61 | — |
| M22  | — | — | — | 0.70 | — |
| M31  | — | — | — | — | 0.96 |
| M32  | — | — | — | — | 0.40 |
| Reliability | 0.77 | 0.86 | 0.89 | — | 0.72* |
| AVE  | 0.54 | 0.60 | 0.62 | — | 0.50* |

*a Refers to weighted average reliability and variance extracted.

Model 1 $\chi^2 = 123.6 (51 \text{ df}, P < 0.0)$, RMSEA = 0.07, CFI = 0.97, AGFI = 0.89.

Model 2 $\chi^2 = 40.7 (11 \text{ df}, P < 0.0)$, RMSEA = 0.08, CFI = 0.95, AGFI = 0.95.
Table 2: Multigroup path analysis of socially responsible and non-responsible investor groups

<table>
<thead>
<tr>
<th>Path</th>
<th>Overall model</th>
<th>Unrestricted Model 1</th>
<th>Unrestricted Model 2</th>
<th>Final Mixed Model I</th>
<th>Final Mixed Model II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High SIG group</td>
<td>Low SIG group</td>
<td>High SIG group</td>
<td>Low SIG group</td>
</tr>
<tr>
<td>EA → SIG</td>
<td>0.13* (1.73)</td>
<td>0.00 (0.02)</td>
<td>0.25 (1.69)</td>
<td>0.00 (0.02)</td>
<td>0.25 (1.80)</td>
</tr>
<tr>
<td>M → EIG</td>
<td>0.27 (4.11)</td>
<td>0.69 (4.04)</td>
<td>0.18 (1.19)</td>
<td>0.40 (4.22)</td>
<td>0.18 (1.28)</td>
</tr>
<tr>
<td>R → SIG</td>
<td>0.00 (0.13)</td>
<td>-0.03 (-0.44)</td>
<td>-0.03 (-0.27)</td>
<td>-0.26 (1.90)</td>
<td>-0.04 (-0.31)</td>
</tr>
<tr>
<td>PV → EIG</td>
<td>-0.10 (-0.47)</td>
<td>0.04 (0.27)</td>
<td>-0.06 (-0.28)</td>
<td>0.29 (2.60)</td>
<td>0.22 (0.92)</td>
</tr>
<tr>
<td>PV → SIG</td>
<td>0.18 (2.67)</td>
<td>0.22 (1.91)</td>
<td>0.29 (2.42)</td>
<td>0.29 (2.60)</td>
<td>0.22 (0.92)</td>
</tr>
<tr>
<td>SIE → SIG</td>
<td>0.16 (4.07)</td>
<td>0.68 (4.81)</td>
<td>0.11 (0.93)</td>
<td>0.66 (5.11)</td>
<td>0.11 (0.91)</td>
</tr>
<tr>
<td>SIG → EIG</td>
<td>-0.47 (-1.23)</td>
<td>-0.54 (-2.95)</td>
<td>-0.20 (-0.46)</td>
<td>-0.51 (-3.22)</td>
<td>-0.24 (-0.96)</td>
</tr>
<tr>
<td>EIG → SIG</td>
<td>0.08 (0.89)</td>
<td>0.68 (3.05)</td>
<td>0.01 (0.16)</td>
<td>0.64 (4.29)</td>
<td>0.02 (0.10)</td>
</tr>
</tbody>
</table>

$\chi^2$ (df) | 45.5 (29) | 24.5 (19) | 25.1 (25) | 26.5 (27) | 27.5 (19) |
| $P$ value | 0.03 | 0.18 | 0.46 | 0.49 | 0.09 |
| RMS/EA | 0.08 | 0.05 | 0.01 | 0.00 | 0.06 |
| CFI, TLI | 0.86, 0.81 | 0.95, 0.89 | 0.99, 0.98 | 0.99, 0.98 | 0.95, 0.92 |

*Denotes fixed path as per Final Mixed Model I.

*Note that we report standardized coefficients to facilitate model comparisons.

Numbers in parentheses represent t-values. Bold numbers indicate significant paths, two-tailed ($P < 0.05$) with the exception of $P < 0.10$.

positively related to EIG in both EIG groups (0.18, *t*-value = 1.80). We did not find support for a differential effect as we had expected (Hypothesis 3). Also, we found support for the proposed influence of religiosity (R) on SIG as per Hypothesis 4 (0.64, *t*-value = 4.22). Hypothesis 5 was supported by the finding of a significant path from PV to SIG (0.25, *t*-value = 3.05) in the high SIG group and a non-significant path in the low SIG group. Finally, we found support for Hypothesis 6 with a significant path (0.30, *t*-value = 5.03) from SIE to SIG in the high SIG group and a non-significant path in the low SIG group. In addition to the above paths, we also found a significant path (0.39, *t*-value = 3.39) from religiosity to SIG in the low EIG group, PV to EIG (0.18, *t*-value = 2.35) in the high EIG group, and SIE to EIG in high (1.08, *t*-value = 3.55) and low (0.29, *t*-value = 1.69) EIG groups, respectively. Collectively, these findings suggest a segmentation approach that capitalizes on the interplay between EIG and SIG.

**DISCUSSION AND MANAGERIAL IMPLICATIONS**

The problem of determining what is SR is considered the ‘holy grail’ in social responsibility research owing to lack of consensus about definitions and metrics. Our approach shifts the onus and attention from this managerial dilemma to the antecedent factors that influence investor expectations of social responsibility. Our findings suggest that investors’ SIG and EIG are interdependent. Our approach provides a different tack on the problem and generates rich psychological insights to help refine segmentation strategies, and improve customization and relationship building efforts. Further, the differential effects of antecedents on investing goals suggest that investors can be segmented along these goal dimensions. A simple typology based upon the findings of our two models is presented below.

Investors can be segmented based on the relative importance they assign to their economic and social goals. They may be divided into four groups based on the emphasis they place on economic goals (high-low) and social goals (high-low) (see Table 3). Each segment is labeled in a manner that reflects the importance attached to the two types of goals and the antecedent influences. Of the 197 respondents in the analysis sample, 48 (24.4 per cent) were classified as Unconcerneds, 41 (20.8 per cent) as Profiteers, 42 (21.3 per cent) as Bleeding Hearts and 66 (33.5 per cent) as Sustainers.

**Table 3:** Investor segments based upon importance of economic and social goals

<table>
<thead>
<tr>
<th>Importance given to economic goals</th>
<th>ER Investors</th>
<th>Non-ER investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance given to social goals</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>SR investors</td>
<td>High</td>
<td>Sustainers</td>
</tr>
<tr>
<td>Non-SR investors</td>
<td>Low</td>
<td>Profiteers</td>
</tr>
</tbody>
</table>

**Sustainers: High importance on economic and social goals**

Sustainers seek to jointly maximize their individual economic and collective social goals. Sustainers are likely driven by materialistic values, as the paths from materialism to EIG were significant in both SIG and EIG groups. This modern approach to social responsibility asserts that in the long run, the creation of wealth and the...
fulfillment of social goals naturally occur together. This is further borne out by the nature of the relationship between EIG and SIG. In both high SR and high ER groups, the paths from EIG to SIG are positive. Sustainers recognize that higher SIG may lead to lower investing economic goals, but higher economic goals may also raise SIG. Such behavior reflects the consumption behavior of reflexive consumers. Reflexive consumers adopt a constructivist approach to socio-political issues and monitor their consumption activities relative to existing cultural norms and customs. They have a greater propensity to question existing practices and tradition, and tend to be proactive in evaluating their individual situations. Reflexive investors may be more inclined to refine their portfolios because of a perceived lower risk of investing in SR companies. Sustainers believe that individual and collective goals can and must be jointly achieved. SIE is of paramount importance to them, and benchmark measures such as the Dow Jones Sustainability Index and the Ethibel Sustainability Index help Sustainers evaluate firm performance on the basis of joint financial and social responsibility considerations. Social responsibility is regarded as a matter of degree or grade rather than a dichotomous distinction.

Bleeding Hearts: High importance on social goals and low importance on economic goals
This segment symbolizes the traditional approach to social responsibility, which holds that self-interest must be forsaken to benefit the common good. Such investors are likely to support the notion of a social contract between the individual and society – the more one receives the more one owes to society. The finding of a negative two-way relationship between EIG and SIG (in high SIG and low EIG groups) supports our assertion. In addition, investors may feel that it is not possible to distinguish normative from instrumental motives when wealth and social gains are jointly created. That is, it is impossible to tell whether social progress is a desirable ‘byproduct’ or being pursued as an end to itself. This approach posits that social responsibility requires the sacrifice of self-interest for social progress, implying that SR investors must be willing to pay an ethical penalty. Thus, we can expect these investors to accept lower rates of return on investments that advance social objectives. Researchers suggest that psychic income can compensate SR investors for financial losses. It was surprising to find that Bleeding Hearts appear to harbor materialistic values. In retrospect, this may not be as anomalous; after all, this exemplifies the American dream. Interestingly, religiosity plays an important role in their social investing decisions – it was found to affect SIG in both high SIG and low EIG groups. In addition, this group appears to be influenced more strongly than any other by protected values, and is less likely to compromise ideals to achieve financial gains. The importance of SIE is underscored by the significant paths in both high SIG and low EIG groups. Financial goals become subservient to social goals, and social responsibility may be regarded as a dichotomous ‘is’ or ‘is not’ property. This group likely perceives that they can discharge their societal responsibilities by boycotting ‘bad’ companies. Therefore, this segment is more likely to use screens to identify suitable investing opportunities.

It was surprising to find the absence of influence of EA on SIG in both high SIG groups (that is, Sustainers and Bleeding Hearts). However, it is likely that SIE completely mediates this relationship as investors grow more concerned about the larger picture. In addition, as the greening of businesses has become a mainstream phenomenon, environmental responsibility is likely viewed as a qualifier and not a differentiator. The issue merits further investigation.
**Proftiteers: High importance on economic goals but low importance on social goals**

Investors who give high importance to individual economic goals and low importance to collective social goals can be distinguished by their cupidity and lack of concern for societal issues. Their overriding self-interest may be motivated by extremely individualistic and materialistic values. This view is supported by the finding of a significant path from materialism to EIG in the high EIG group. Their lack of concern for social progress may stem from a perceived lack of SIE (for example, I can’t change the world on my own). This premise needs further investigation, as the path from SIE to SIG was not significant in the low SIG group, but was significant in the high EIG group. Also, they are likely to be less concerned about protecting the natural environment. At the same time, religiosity has no influence on their investing goals as suggested by non-significant paths from the antecedent to SIG in both low SIG and high EIG groups. Much of the research that debunks the impacts of investor boycotts on the share prices of socially irresponsible companies is implicitly based on the exploitative instincts of investors profiled in this segment. The standard textbook argument in support of this view is that even if share prices drop as a result of a boycott, there are a sufficient number of buyers to capitalize on the profitable trading opportunity. Further research on this matter is necessary as the path from economic to SIG was significant in the high EIG group, but not significant in the low SIG group.

**Unconcerned: Low importance on economic and social goals**

Investors who place little importance on their economic goals and social progress may appear apathetic and inert on the surface. However, this may be an inaccurate characterization for a number of reasons. First, consider that many investing choices are severely constrained. Most Americans participate in the stock market through employer-defined retirement plans. They have little control over the direction or timing of investments into their retirement accounts. Employer-defined benefit plans (44 per cent of all retirement funds) do not permit any individual input into investing decisions. Investor choice is also limited in case of employer-defined contribution plans (22 per cent of all retirement funds) to a select set of financial services providers. Second, current consumption patterns and economic statistics indicate that the average US household has little money left over to invest, over and above their retirement contributions. According to a 2003 Congressional Budget Office Study, the personal savings rate has been declining steadily for the past two decades, and current Bureau of Economic Analysis (BEA) estimates indicate a negative savings rate. At the same time, consumer spending has grown by over 150 per cent from 1990 to 2003 in inflation-adjusted dollars. Third, investing requires advanced knowledge and expertise. Even those that enjoy the benefit of self-directed retirement plans may lack the skill or time to closely track the progress of their investments. Finally, research indicates that investors who participate through employer-defined plans tend to desist from actively managing their investments either because of inertia or because they perceive that the default options constitute investing advice. Therefore, it should come as no surprise that a large number of Americans fall into this category of investors. We posit that these constraints on behavior influence investing goals through response efficacy and investor inertia. First, this segment likely perceives a low response efficacy—that is, a low probability that investing goals will solve their social or economic problems. Hence, investing goals are given less importance and consideration. Further, investor inertia arising from the need to do ‘nothing’ to preserve the status quo lowers
the likelihood that Unconcerneds will devote
time and attention to their investing goals.

The findings regarding the influence of
EA (significant path in low SIG group) and
materialism (significant path in low EIG
group) on SIG were mixed and deserve
further consideration. In addition, a sig-
ificant path from religiosity to SIG in the
low EIG group (but not in the low SIG
group) suggests that more work needs to be
done to understand this group’s motivations.
Protected values do not appear to play a role
in the formation of SIG as evidenced by the
non-significant paths from this antecedent to
SIG in both low SIG and low EIG groups.
Further, SIE is unlikely to influence this
group’s SIG. Unconcerneds may believe that
it is necessary to sacrifice some economic
gains to achieve social benefits (significant
negative path from SIG to EIG). However,
unlike Sustainers, they are unlikely to
endorse the convergence of economic and
social wealth.

Mutual funds and investor portfolios must
be customized for different segments to
reflect the relative importance of economic
and social goals in light of their inter-
dependence. For instance, Bleeding Hearts
might be willing to accept lower rates of
return, whereas Sustainers would not. Our
contention is that investors perceive the
domains of social and economic gains and
losses very differently. Although some SR
investors (that is, Bleeding Hearts) may
be willing to compensate for economic
losses through psychic gains, they may be
unwilling to forego social losses (especially
those protected values) for economic gains.
Therefore, it is imperative that fund
managers determine the size of the Bleeding
Heart segment and their willingness to
accept additional risk and/or lower rates
of return to fulfill their social goals. Further,
while targeting SR investors can expand
market potential, any additional exclusionary
criteria, such as negative screens, may
increase market risk and opportunity costs.
Fund managers would be well advised
to adopt strategies to lower tracking errors
relative to conventional benchmarks such
as the Russell or the DJ indices.

Relationships are particularly important
in the financial services sector. A focus on
antecedent influences provides opportunities
to deploy differentiated strategies and allocate
resources based on investor needs. For
instance, financial performance is equally
important to both Proﬁteers and Sustainers
in light of their focus on economic goals.
However, our findings suggest that Sustainers’
expectations of fiduciary duties may extend
beyond communicating ﬁnancial returns to
assuring impacts of investments on environ-
mental and social performance.

We found that religiosity was a signiﬁcant
inﬂuence on SIG for Bleeding Hearts.
This is not surprising given the historical
roots of SR investing in the United States.
Fund managers recognize these differences
and employ exclusionary screens to weed
out companies marketing ‘sin’ products
such as tobacco, alcohol, pornography and
gambling. Our ﬁndings underscore the
importance of religious values for Bleeding
Hearts. This has signiﬁcant implications for
media strategy and product design. For
instance, television shows like Touched by
an Angel and the 700 Club might appear
well suited for these segments. However,
religious beliefs may vary widely from the
most liberal investor who wishes to
champion gay rights or abortion to the
most conservative investor who wishes to
promote the exact opposite. Therefore, a
better and deeper understanding of the
beliefs underlying various faiths is essential
for product customization. Consequently,
we expect a greater proliferation of hybrid
funds in the future (for example, KLD
Catholic Values Index), which simultaneously
conform to ethical standards and espouse
speciﬁc subsets of religious values.

Bleeding Hearts and Sustainers strongly
believe that their investments produce social
advantages. Interestingly, this ﬁnding is
mirrored in the domains of philanthropy
and environmentalism in which donors and environmentally responsible consumers are more likely to believe that their actions benefit the common good. Over the past 20 years, researchers have consistently found evidence to support the importance of efficacy for donorship and environmentally responsible behaviors.\textsuperscript{56,57} This finding has significant implications for fund managers – they must reinforce the notion of efficacy by communicating back to the investor the impact of shareholder advocacy efforts and the investments on the focal social issue. Too often, reporting is treated simply as a fiduciary obligation and important messages are swamped under the weight of financial data. We recommend that separate communications that specifically address these issues be devised and delivered periodically to Bleeding Hearts and Sustainers. Such reinforcement is vital not only to ensure their continued patronage, but also to attract potential investors.

Protected values had a strong association with SIG for Bleeding Hearts, suggesting that exclusionary criteria (that is, negative screens) would be especially important to this group. Note that most screens are based to a large extent on subjective managerial assessments because of the strong linkages (stock holdings, common board members and so on) among modern corporations. Therefore, an understanding of investors’ protected values will serve not only to prioritize social issues, but also to enhance the quality of screening decisions. In addition, we focused only on the influence of inviolable acts on investor goals. An interesting research question is how varying levels of progressive practices might affect investor goals and behavior.

We acknowledge that since our approach utilizes cross sectional and not panel data, our models capture associations and not causal influences. In summary, we suggest that a focus on the relative importance of economic and social goals can provide a better understanding of psychological antecedents that motivate investing behavior.

REFERENCES

Kashyap and Iyer

Not everybody wants to save the world

APPENDIX

Environmental attitude
EA1 I feel a moral obligation to help protect the environment in whatever way I can.
EA2 I believe harm to our environment is a serious problem.
EA3 I take responsibility to protect the environment around me.
EA4 I feel connected with nature and the world around me.D
EA5 I think of myself as an environmentalist.D

Social investing efficacy
SIE1 I believe my investments have a positive impact on the environment.
SIE2 I think my investments have a favorable effect on community welfare.
SIE3 I want my investments to enhance society’s welfare.
SIE4 I think my investments will improve the condition of the ecosystem.
SIE5 My investments will have a positive bearing on corporate governance.D

Religiosity
R1 Spiritual values guide me in making important decisions.
R2 If more Americans used their religion, they would make better choices.
R3 My religious beliefs help me recognize the dignity and welfare of people.
R4 I am guided by my religion to ensure that my actions do not intentionally harm others.

R5 I would describe myself as very religious.

Materialism
M11 I measure my achievements through my material possessions.
M12 My possessions speak a lot about my status.
M13 I like to impress people with my material possessions.
M21 I like to keep my life materially simple.R
M22 Owning things is not very important to me.R
M31 I’ll feel happier if I own more things.
M32 I don’t have all the things needed to enjoy life.

Economic investing goals
1. My financial strategy is focused solely on earning the best possible return.
2. Increasing my financial wealth through investing is my primary goal.
3. My investments must exceed a minimum expected rate of return.
4. It is important that the returns provided by my investments make me happy.

Social investing goals
1. The main goal of my investment strategy is advancing social agendas.
2. I aim to promote environmental causes through my investment decisions.

Protected values
No matter how large the benefits, my personal values would not allow me to ever invest in a company that

1. manufactures firearms;
2. manufactures alcoholic beverages;
3. manufactures or markets tobacco products;
4. operates casinos and gambling businesses;
5. develops products that harm the environment;
6. owns or operates nuclear power plants;
7. derives revenues from the sale of pornography; and
8. was involved in tax fraud.

R Denotes Reversed Item; D Denotes Dropped Item