The Journal of Behavioral Finance
2007, Vol. 8, No. 1, 43–57

Some Determinants of the Socially Responsible Investment Decision: A Cross-Country Study

Geoffrey Williams

This paper develops a general model of investor choice to analyze socially responsible investment (SRI). Drawing on data from a large survey of investors across five countries, we show that SRI may be driven more by investor attitudes toward the social aims of firms rather than by financial returns. We also show that investors who are concerned about social issues as consumers appear to extend this behavior into their portfolio strategies. We find little evidence that demographic factors affect SRI, but some indirect evidence that market context in terms of institutional ownership and the regulatory environment may play a role.

Introduction

According to the Social Investment Forum (SIF [2003]), more than 11% of all equity and fund holdings in the United States are in socially responsible investment (SRI) funds. In the United Kingdom, it is estimated that 59% of the largest pension funds, representing 78% of all pension assets in the U.K., have incorporated social issues into their investment strategies (U.K. Social Investment Forum (UKSIF) [2000]). These include concerns about the environment, working practices, treatment of employees, corporate ethics and governance, charitable and community contributions, as well as screening to avoid socially damaging products like tobacco and military hardware. While there is some debate on what SRI actually is (Sparkes and Cowton [2004]), a common definition is:

> Socially responsible investing (SRI) is an investment process that considers the social and environmental consequences of investments, both positive and negative, within the context of rigorous financial analysis. It is a process of identifying and investing in companies that meet certain standards of Corporate Social Responsibility (CSR) SIF [2003, p. 3].

Standard theories of investor behavior are based on the premise that investors aim to maximize risk-adjusted financial returns over a given time horizon, and that their investment choices will be almost uniquely determined by this objective. The growth in SRI provides *prima facie* evidence that financial returns may not be the only criteria used by a significant number of investors, and that ethical and social considerations may also play an important role.

This observation has received relatively little attention in the behavioral finance literature, but a number of broader management studies, especially on corporate ethics, corporate governance, and corporate social responsibility (CSR), have begun to provide some evidence that social factors are important in investor choices. Rather than using a single theoretical framework, these studies apply general approaches from the finance literature such as standard pricing and returns models (see, for example, Russo and Fouts [1997], Cummings [2000], Dowell, Hart, and Yeung [2000], Tippet [2001], and Stone et al. [2001]). Others apply theories of investor types and investor psychology (O'Neil and Pienta [1994], McLachlan and Gardner [2004], Goyen, Phillips, and Beal [2005]); theories of consumer behavior and marketing in conventional investment (Thaler [1980], Wilcox [1999], and Clark-Murphy and Soutar [2005]); stakeholder theory (Freeman [1984, 1994], Waddock and Graves [1997, 1999]); and simple demographic profiling (Rosen, Sandler, and Shani [1991], Tippet [2001], Hayes [2001], and Tippet and Leung [2001]).

To provide a focus for these many alternative approaches, we develop a general model of investor choice to analyze some key factors from the literature as potential determinants of the SRI investment choice. They include demographic factors, as well as investor attitudes and behavior. We draw on data from a large survey of investors across five countries in which SRI is relatively well known, which also allows us to assess whether the market context in different countries may be a determinant in the SRI decision.

Our research makes three main contributions. First, we test a number of hypotheses suggested in the current

Dr Geoffrey Williams is a Managing Director at OWW Consulting Pte, Ltd. He is also at the Centre for Business, Organizations and Society in the School of Management at the University of Bath.

Requests for reprints should be sent to: Dr. Geoffrey Williams, Managing Director, OWW Consulting Pte. Ltd., 32 Maxwell Road, #03-07 White House, Singapore 069115. Email: geoffrey.williams@oww-consulting.com

academic and practitioner literature on SRI within a single empirical framework. Second, we provide a cross-country analysis that compares the behavior of SRI investors in different contexts and is generally not available in other studies. Third, we provide insights for practitioners and providers of financial products into what factors are driving SRI growth across the countries in our study.

The paper is organized as follows: the second section provides some background on SRI and the dataset we use for the five countries in our sample. The third section presents our dataset and develops hypotheses from a review of the literature, which we test within a general empirical framework in the fourth section. In the fifth section 5 we present our results, and the final section provides some discussion and conclusions.

Background on SRI in Five Countries

Australia

The mainstream ethical investment movement in Australia began in 1981 with the establishment of August Investment Proprietary Limited (in 1989, it became the Australian Ethical Investment Trust) (Cummings [2000]). The first public ethical fund, established in 1986, was the Tower Life Ethical Fund Series (formerly Friends' Provident Ethical). In 1989, Tyndall Ethical Balanced Investment Trust was set up as the YWCA (Young Women's Christian Association) Ethical Investment Trust, which screened for a range of social factors (Tippet [2001]). In 1996, the Ethical Investment Association (EIA) had ten funds, which had increased to eighty-nine by 2004.

Several ethical investment milestones occurred at the end of the 1990s. In 1999, the Ethical Investment Association (EIA) was formed. Among other things, the EIA began a series of benchmarking reports on SRI in Australia, supported by private stakeholders and the Australian Government Department of Environment and Heritage. Knowles [2000] also provides some estimates for an earlier time period.

The Financial Services Reform Act (FSRA) of 2002 introduced ethical product disclosure statements (PDSs) for financial services. These were followed in 2003 by the Australian Securities and Investment Commission (ASIC) SRI Disclosure Guidelines. A major government-sponsored report appeared in 2003, and concluded that SRI in Australia was in its early stages but was expected to become increasingly important in the future (Mays and BT Financial Group [2003]).

The EIA annual reviews of SRI show a significant increase in activity, from A$10.5 billion (U.S. $5.4 billion) in 2001 to A$21.5 billion (U.S. $14.5 billion) in 2004. A substantial portion is held by religious organizations (which we discuss below). There has also been considerable growth in managed and private SRI funds and in employer pension funds with an "SRI overlay," that is, shareholders who actively work with firms to ensure their policies meet SRI criteria. Charities and community finance programs are also important in Australia (EIA [2004]).

Canada

The first Canadian SRI fund, the Ethical Growth Fund, was introduced in 1986 by the Ethical Growth Company (Ellmen [1996]). By 2002, there were more than fifty funds available in Canada, including many from U.S. companies active in the Canadian market (SIO [2005]).

This decade has seen a number of regulatory changes, including to the Canadian Business Corporation Act of 2001 that removed a clause that had prohibited shareholder proposals for changes in company policy based on social aims. The Canadian Institute of Chartered Accountants introduced disclosure guidelines in 2001 and there were further initiatives on mandatory continuous disclosure in 2004.

SRI lobbying has been organized by a number of groups, including the Social Investment Organisation (SIO), established in 1989. The SIO produces a biannual survey of SRI in Canada and an annual conference of SRI stakeholders. Religious groups like the Mennonite Savings and Credit Union (MSCU) have also played a role. The MSCU entered into a joint venture with Meritas Mutual in 2004 to bring their SRI products to a wider market.

Germany

In Germany, SRI initiatives evolved during the 1970s as part of the environment and peace movements' focus on alternative forms of economic and trade policies. One outcome was the foundation of the "alternative bank," GLS Gemeinschaftsbank, in 1974, to offer loans to projects and institutions with social or environmental aims that might otherwise be excluded from the traditional finance sector. In 1988, Oekobank became the first to offer socially responsible products at the retail end of the market, and the first SRI-based investment fund, BfG ÖkoRent (now SEB ÖkoRent), was offered in 1989.

SRI investments in Germany were also influenced by government policy changes that often came about because of the presence of the Green Party in coalition governments. An example is the Renewable Energy Act of 1991, which encouraged the installation of wind power stations. Tax advantages for investment funds focusing on renewable energy increased the interest in these types of products, as well as shares in "green" companies, life insurance with SRI criteria, and, above all, green investment funds.

There is also strong interest in SRI vehicles from religious institutions. For example, the Corporate Responsibility Interface Center (CRIC e.V.) provides published investment criteria for investors with a religious background, foundations, pension trusts, and other institutional and private investors.[1]

United Kingdom

Ethical investment in the U.K. has its origins in Victorian social concerns about temperance and fair employment conditions. Ethical banking in its modern form began in 1974 with the creation of Mercury Provident (now part of Triodos Bank), which lent only to projects with clear social aims. In 1992, ethical banking became more widespread when the Co-operative Bank introduced its successful ethical policies into the retail banking sector.

The first ethical investment trust in the U.K. appeared in 1984 with the launch of the Friends Provident Stewardship Fund. This led to rapid growth in SRI funds, especially those focusing specifically on environmental issues such as the Merlin Ecology Fund (now the Jupiter Ecology Fund) in 1988. Environmental funds are now common in the U.K. market.

In the 1980s and 1990, Conservative governments began to reform the private pensions market. The "Stakeholder Pensions Scheme"[2] by the Labour Government extended these reforms. As a result, the U.K. market has been highly influenced by pension funds, which today own more than 33% of all U.K. shares (up from 7% in 1963).[3]

In 1997, a group of university lecturers launched the "Ethics for USS (the Universities Superannuation Scheme) Campaign" for the ethical and environmental investment of their pension funds. The USS adopted a policy on Sustainable and Responsible Investment in 2000. In the same year, U.K. law was changed to require all occupational pension funds to consult formally with members about whether to adopt policies on social, ethical, and environmental issues. The two largest funds affected by this accounted for £64.4 billion (U.S. $118.1 billion) in 2004: the USS, with £19.4 billion (U.S. $35.5 billion), and the Local Authority Pension Fund Forum, with £45 billion (U.S. $82.4 billion).

The retail section of the SRI market is much smaller in the U.K., but is still significant. As of 2003, £4.2 billion (U.S. $6.9 billion) was held by retail shareholders across approximately sixty specialist SRI funds (source: Ethical Investment Research Service, EIRIS). And there is now a wide range of private non-profit and commercial sources of SRI investment information. One of the most important is social indexes, baskets of shares in companies chosen as leaders in social and environmental performance, such as the FTSE4GOOD family of social indexes introduced in 2001 (which followed the earlier introduction of the Dow Jones Sustainability Group Indexes).

In 1991, the formation of the U.K. Social Investment Forum brought together key players across the full range of ethical and socially responsible investment to share knowledge and advance the SRI agenda. An increasing numbers of organizations act as commercial suppliers of SRI research and information to U.K. investors.[4]

The United States

In the U.S., SRI appears to have grown from the political climate of the 1960s and 1970s, although Schueth [2003] argues that its history may stem from the religious beliefs of early American immigrants. The Pax World Balanced Fund of 1971 and the Calvert Investment Group Funds of 1982 are the pioneers in ethical screening. In 1991, the creation of the Domini Social Equity Fund provided both ethical screening and shareholder advocacy.

The U.S. environment is characterized by greater diversity among SRI approaches. In Europe, SRI is developing within the context of increasing government regulation, formal standards, and changing institutional strategies; in the U.S., SRI is mainly promoted by independent organizations and specialist fund providers.

As Lydenberg [2002] notes, in the U.S., the "Wall Street rule" has generally applied: Shareholders are expected to regulate managers by selling shares instead of using engagement and shareholder advocacy to change management practices. As a result, regulation by the U.S. Securities and Exchange Commission has historically focused on providing shareholders with access to proxy statements to allow disclosure of social and environmental issues. This is an alternative to direct disclosure regulations adopted elsewhere, but tends to make SRI more information-dependent and more sporadic. A number of sources in the U.S. provide information on corporate social performance indicators, including the Dow Jones Sustainability Index (DJSI) launched in 1999, and the first index of its type, the Domini Index, launched in 1990.

The SIF reports that shareholder advocacy, measured by SRI-related resolutions, increased by 15% between 2001 and 2003 (Social Investment Forum [2003]), but only 20.7% of SRI funds use both screening and advocacy. 78.6% of SRI funds applied screening only, suggesting that regulation through buying patterns still dominates regulation through engagement.

Religious Organizations

Religious organizations have played a major role in the early stages of SRI in most of the countries we study here, and they still command considerable assets. In Australia, religious organizations held an estimated

Table 1. *Percentage Distribution of SRI Funds in Selected Countries*

	Australia		Canada		U.K.		U.S.	
	2001	**2004**	**2000**	**2004**	**1997**	**2001**	**2001**	**2003**
Managed	12.4	15.3	22.6	32.4	9.7	1.6	5.9	7.0
Retail	25.6	14.7	20.7	22.6	0.0	0.0	13.0	0.3
Institutional	0.0	33.5	54.5	38.9	0.0	81.5	80.8	92.0
Other	62.0	36.5	2.2	6.1	90.3	16.9	0.3	0.6
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Australia: EIA Annual Survey. Canada: SIO Review 2004. U.K.: Sparkes [2002]. U.S.: SIF Bi-annual Review 2003.

A$6.3 billion (U.S $3.3 billion), or 60%, as of 2001, and A$7.2 billion (U.S. $4.8 billion) or 33% in 2004 (EIA [2004]). In Canada, Kairos, the ecumenical coalition of Canadian churches, reports that in 2004 three of its members (who use ethical screens) had assets worth C$1.37 billion (U.S. $1 billion), or about 5% of Canadian institutional SRI.

In the U.K., Sparkes [2002] estimates that churches controlled £12.5 billion (U.S. $20.2 billion), or 55% of SRI assets in 1997, and £13 billion (U.S. $19.7 billion), or 6%, in 2001, excluding property. The fall in the churches' share of SRI is mainly attributable to the rise of other investment vehicles like commercial funds and occupational pension funds. In the U.S., the Interfaith Centre on Corporate Responsibility (ICCR) claims the portfolios of its members are worth about U.S. $100 billion, with $900 million in community development investments.[5]

Many countries now have religious-based SRI organizations. The Christian Centre for Socially Responsible Investment (CCSRI) was established in Australia in 2002, following the ICCR and the U.K. Ecumenical Council for Corporate Responsibility (ECCR). In Germany, the Corporate Responsibility Interface Centre (CRIC e.V.) also provides SRI advice from a religious perspective.

Institutional Breakdown

As Table 1 shows, the role of financial institutions in SRI has become increasingly important. This is driven by a number of factors on the demand side, as well as increasingly demanding regulations on the supply side (discussed further in section 3.5.). A survey published by the UKSIF in October 2000 found that 59% of the largest pension funds, representing over £235 billion (U.S. $430.5 billion), or 78%, had incorporated social responsibility issues into their investment strategies (Mathieu [2000]).[6] The U.K. Office for National Statistics estimates pension funds accounted for 17.7% of all investment assets, so SRI-related products may have accounted for *at least* 13.8% of institutional investment, excluding insurance companies, unit trusts, and others. Since then, the adoption of SRI screens by pension funds has increased, and new regulations have been introduced in the insurance market and other financial products. We estimate that the percentage of SRI-related products has increased dramatically since publication of this survey.[7]

The SRI market is also dominated by institutions in the U.S., and there is a high institutional component in Canada. In Australia, the proportion is relatively low, however, because 1) there is a higher proportion of direct share ownership,[8] and 2) the SRI fund market there is at an earlier stage of development. Differences in the distribution of SRI assets are likely to affect investor behavior across countries, an idea we develop further in Section 3.5.

Empirical Comparison of SRI Funds

Table 2 provides some summary statistics drawn from a number of sources on SRI for the countries we cover here. Note that the data need to be interpreted carefully, however.

For example, the U.K. figures are based on EIRIS estimates of SRI in the consumer sector. Including institutional SRI would put total U.K. SRI investment at a minimum of 14.9% in 2000. This would make the U.K. figures similar to those for the U.S., but the SRI criteria would be less stringent than surveys in Australia and Canada that only include funds describing themselves as ethical, socially responsible, or sustainable. U.S. methodology includes any fund that uses one or more SRI screens, thus the inclusion frame is wider.

Data for Germany is less readily available on a comparable basis, but we have gleaned some information from the European Sustainable and Responsible Investment Forum (Eurosif [2003]).

Data on Individual Investors and Hypothesis Development

Data on individual SRI investors is not as readily available as aggregate data. One useful source is the extensive survey of individual stakeholder attitudes

Table 2. *Overview of SRI in Selected Countries*

	Australia[1]	Canada[1]	U.K.[2]	U.S.[1]
Total SRI Funds (U.S. $billions)[3]				
2004	14.5	46.8	—	—
2003	13.8	—	6.9	2164.0
2002	7.6	32.7	5.2	—
2001	5.4	—	5.8	2320.0
2000	—	33.6	5.0	—
1999	—	—	4.0	2159.0
% All Equity and Fund Holdings				
2004	1.8	3.6	—	—
2003	1.8	—	2.1	11.3
2002	1.2	3.3	2.1	—
2001	0.9	—	1.8	11.7
2000	—	3.2	1.1	—
1999	—	—	0.9	13.3
% Growth of SRI Assets[4]				
2004	1.0	27.4	—	—
2003	53.0	—	20.0	−6.7
2002	32.0	3.0	−13.0	—
2001	—	—	22.1	7.5
2000	—	—	34.7	—
1999	—	—	28.8	82.2
No. of Funds				
2004	89	—	57	—
2003	63	—	54	200
2002	74	53	62	—
2001	46	—	60	181
2000	—	—	44	—
1999	—	—	44	168

Sources: Australia: Ethical Investment Association and Australian Government: Invest Australia. Canada: Social Investment Organisation (bi-annual survey). U.K.: The U.K. Social Investment Forum, the Ethical Investment Research and Information Service (EIRIS), and U.K. Office for National Statistics. U.S.: The Social Investment Forum (bi-annual survey).

[1]These figures are based on a similar methodology and include consumer and institutional SRI estimates.

[2]These figures are for consumer investment only and are from EIRIS. Institutional investment estimates are discussed in the text.

[3]Based on national currencies from the sources above, recalculated using average exchange rates over the year.

[4]Growth rates are based on estimates in national currencies, not U.S.$, and so avoid errors due to exchange rate changes.

toward CSR published annually by GlobeScan Ltd. This survey first appeared as the *Environics Millennium Poll* in 2000, and covers a fully stratified, representative sample of approximately 1,000 respondents each year from a wide selection of countries. We use the 2003 survey responses and focus on the five countries we discuss here, which have the highest number of shareholders and the most well-developed SRI focus in their investment industries. To identify SRI shareholders, we asked:

> Do you currently own shares in a company listed on a stock exchange, either directly or indirectly through a mutual fund, pension plan, or other retirement fund?

1. I own shares directly.
2. I own shares indirectly through a mutual fund, pension plan, or other
3. retirement fund.
4. I do not own any shares.
5. I own shares both directly and indirectly.

Our analysis is based on respondents who answered either (1), (2), or (4), from which we identify SRI investors using the following question:

> Has a company's demonstrated social responsibility ever had an influence on your investment decisions? Have you either bought or sold its shares as a result?

1. It had an influence at least once.
2. I considered it, but didn't buy or sell shares as a result.
3. It had no effect on my share purchases or sales.

We defined SRI investors as those who answered (1), and conventional investors as those who answered (2) or (3). This allowed us to identify active SRI investors as a separate group. We assumed that all investors are likely to consider all information about companies, but only those who actually act on the social aspects of the information are considered SRI investors.

The demographic data covers eight respondent characteristics: age, income, education level, gender, community size, Internet use, employment in large companies, and religion. Our data on attitudes are collated from responses to six other questions in the survey (see Table 3).

Note that this survey was not originally designed for our project. Thus the hypotheses we develop are driven in part by the questions that were actually asked rather than by the questions we would have asked. The scope of the hypotheses we can test is somewhat limited (for example, we cannot test for risk aversion). Nonetheless, the questions available are wide-ranging and appear to offer opportunities to test most of the salient SRI hypotheses.

Financial Returns

The largest part of the SRI literature focuses on the financial performance of ethical investments, and more specifically whether increasing interest in these products is attributable to their higher returns relative to conventional investment vehicles. The results are mixed. Early studies looked at cause-related investment, such as the 1980s South Africa boycott. Grossman and Sharpe [1986] show that portfolios screened to exclude South Africa-related businesses performed slightly better than unscreened portfolios over

Table 3. *Questions and Metrics on Shareholder Demographics, Attitudes, and Behavior*

Hypothesis	Question	Metric
H_1: Perception of Profitability of Socially Responsible Companies	Companies that are socially *responsible* are more profitable than socially *irresponsible* companies	Scale: (1) Strongly Agree to (5) Strongly Disagree
H_2: Religion	Do you consider yourself to be. . . ?	Six Major Religions, plus Other, Nothing, and Don't Know
H_3: The Role of Firms (Use Option 2 only)	People have different views on the role of large companies in society. In your view, *should* large companies. . . ?	1. Focus on making profit, paying taxes, and providing employment in ways that obey all laws. 2. Do all this in ways that set higher ethical standards, going beyond what is required by law and actively helping build a better society for all. 3. Operate somewhere in between these two points of view.
H_4: Shareholder versus Social Priorities of Firms - Friedman [1970] Hypothesis	Companies should be more responsible to their shareholders than to society	Scale: (1) Strongly Agree to (5) Strongly Disagree
H_5: Financial versus Social Performance of Firms	As an investor, a company's social and environmental performance is *not* as important to me as its financial performance	Scale: (1) Strongly Agree to (5) Strongly Disagree
H_6: Propensity to Punish (Use Option 3 only)	In the past year, have you considered punishing a company you see as *not* socially responsible by either refusing to buy their products or speaking critically about the company to others?	1. I have not considered doing this. 2. I considered this but didn't actually do it. 3. I have actually done this in the past year.
H_7: Income		Quintiles (1) lowest to (5) highest
H_8: Gender		Dummy = 1 if Female
H_9: Education		(1) Low; (2) Medium; (3) High (University/College Graduate)
H_{10}: Age		Six Age Groups ranging from 18 to over 90
H_{11}: Internet Use	Have you personally used the Internet or e-mail either at home or at work in the past six months?	Dummy = 1 if Yes
H_{12}: Town Size		10,000 to (5) >1 million
H_{13}: Work (Use Options 1 & 2)	Do you or does someone in your household currently work for a large for-profit company with over 1,000 employees?	1. Respondent does. 2. Other household member does. 3. No.
H_{14}: Confidence in Company Accounting	I do not trust the accuracy of company accounting	Scale: (1) Strongly Agree to (5) Strongly Disagree

1960–1983. By contrast, Teoh, Welch, and Wazzan [1999] find the boycott had almost no effect.

Environmental issues have also been highlighted. Russo and Fouts [1997] find that companies with a better environmental performance appear to have above-average returns when adjusted for a wide range of factors. Dowell, Hart, and Yeung [2000] find similar results for the price/book ratios of U.S. multinational corporations that adopt high global environmental standards instead of lower local standards. Guenster et al. [2005] use the *Innovest* environmental ratings, and find a significant relationship with both firm valuation and operating results.

More generally, Gompers, Ishii, and Metrick [2003] show that firms with corporate governance practices focusing on management aims rather than social aims tend to have lower price/book ratios. Also, firms with low corporate governance ratings had significantly below-average risk-adjusted returns over the period 1990–1999. Orlitzky, Schmidt, and Rynes [2003] use a meta-analysis of extant corporate social performance studies and find a statistically significant, positive association with corporate financial performance.

In contrast, other studies show that the effect of social responsibility issues may be small or neutral. Stone et al. [2001] show that the returns of a stock selection model were not decreased by the implementation of social screens over 1984–1997. Hamilton, Jo, and Statman [1993] study the risk-adjusted returns of socially screened mutual funds and find they are statistically indistinguishable from those of unscreened funds.

Similarly, Bauer, Koedijk, and Otten [2005] measure the risk-adjusted performance of 103 German, U.S., and U.K. screened mutual funds over the period 1990–2001, and find no significant differences between their returns and those of unscreened funds. Cummings [2000] and Tippet [2001] find similar evidence that the performance of Australian ethical investment trusts is worse or neutral relative to conventional investments.[9]

To distinguish between these alternative sets of results, we test the following directional hypothesis:

> H_1: The likelihood that social factors will influence investment decisions is higher among investors who believe that responsible companies are more profitable.

Ethical Priors

Obviously, some investors choose ethical investment strategies because of their personal values and ethics. These may arise from *inter alia* personal utility value or the "feel good" effects from social investing (Webley, Lewis, and Mackenzie [2001], Schueth [2003], and Michelson et al. [2004]), from sociocultural influences on perceptions of corporate responsibility (Hofstede and Hofstede [2005], Katz, Swanson, and Nelson [2001], and Williams and Zinkin [2005a]); or from prior religious views (Naber [2001b], Brammer, Williams, and Zinkin [2005], Williams and Zinkin [2005b]). The influence of these types of factors is not straightforward (Lewis [2002], Mackenzie and Lewis [1999], Lewis and Mackenzie [2000]), but there is some evidence that ethical views are relevant in the motives and outcomes of SRI decisions (Schueth [2003], Michelson et al. [2004], Sparkes and Cowton [2004]).

Friedman [1970] presented an alternative view, that the social responsibility of firms is to earn profits for their shareholders. That is, considerations for wider stakeholder groups should not be a priority. *A priori* SRI investors should have a wider social focus, which we test for with the following hypotheses:

> The likelihood that social factors will influence investment decisions will:
>
> H_2: Be higher among respondents who have a religious affiliation,
>
> H_3: Be higher among those who identify ethical behavior as an important aim of firms,
>
> H_4: Be lower among those who believe firms should prioritize shareholder interests over social aims (Friedman [1970]),
>
> H_5: Be higher among investors who prioritize social aims over financial aims.

The Link Between Investor and Consumer Behavior

The connection between consumer and investment behavior has been the subject of a number of studies (Thaler [1980], Wilcox [1999], Clark-Murphy and Soutar [2005]). In the context of SRI, Goyen, Phillips, and Beal [2005] suggest there is a trade-off between financial and psychic returns for some SRI investors: They may gain non-financial utility from the fact that their investments have a social dimension. O'Neil and Pienta [1994] find SRI investors tend to be more "other-centered" than "self-centered."

McLachlan and Gardner [2004] apply an adaptation of the consumer decision-making styles model of Sproles [1985] and Sproles and Kendall [1986] to SRI investors in Australia. They show that SRI investors tend to be more "perfectionist" in style than conventional investors. They are also more likely to suffer "confusion from over-choice," that is, they find it harder to determine good investments. Our survey contains a question on whether respondents have "punished" what they consider bad social performance as consumers. We use this as our proxy for the consumer-investor link to test the following hypothesis:

> H_6: The likelihood that social factors will influence investment decisions will be higher among investors who have punished firms for poor CSR as consumers.

Demographics

Demographics are often used to profile conventional investors for marketing financial products. A number of characteristics appear to be common, for example, share ownership tends to be higher among men than women, and tends to increase with age, income, and educational attainment (ASX [2005], ICI [2005]).

Demographic studies confirm several differences between SRI and conventional investors. For example, Rosen, Sandler, and Shani [1991] and Hayes [2001] find SRI investors tend to be younger. Tippet [2001] and Tippet and Leung [2001] find they are better educated and female rather than male. This fits with the findings of Schueth [2003], who suggests that SRI in the U.S. is driven by general improvements in education levels and from the wider involvement of women in the equities market.

Differences in income levels may also be important. Tippet [2001] suggests there may be an "ethical penalty" in less diversified portfolios arising from lower returns or higher risk. Consequently, he argues that ethical investors are likely to be wealthier and more able to accommodate this financial cost (Tippet [2001], Tippet and Leung [2001]). On the other hand, McLachlan and Gardner [2004] studied SRI in Australia and found no evidence of differences in age, education level, or income for SRI investors.

Some have suggested that stakeholder issues may also influence SRI (KPMG [2005, p. 25]). For example, Waddock and Graves [1997] show that relationships with community stakeholders appear to be important, especially where company activity has a big impact on small communities. Waddock, Graves, and

Gorski [1998] show that companies in the Dow Jones Sustainability Index (DJSI) tend to have a higher average number of employees. This implies that employees in large companies may influence company behavior more actively than employees in smaller companies.

Information about the social performance of companies is important for stakeholder recognition of CSR and their subsequent behavior toward firms (Mohr, Webb, and Harris [2001], Crane and Livesey [2002], KPMG [2005]). The Internet is an increasingly important source of this information (Esrock and Leichty [1998], Williams and Ho [1999], Coupland [2003], Coupland and Brown [2004], Chambers et al. [2003]). Investors in general use many information sources, but since ethical screening requires more detailed information, we expect SRI investors to be more active in their use of the Internet as a data source.

We propose the following hypotheses on demographics:

> The likelihood that social factors will influence investment decisions will:
>
> H_7: Increase with income group,
>
> H_8: Be higher among women,
>
> H_9: Increase with educational attainment,
>
> H_{10}: Decrease with age group,
>
> H_{11}: Be higher among Internet users,
>
> H_{12}: Decrease with community size,
>
> H_{13}: Be higher among investors who work in large firms.

Practitioner Literature

Practitioner research tends to differ from academic literature because it is often based on market context, which differs from country to country. For example, the U.K. Social Investment Forum identifies a set of key drivers of the increase in SRI from both the demand and the supply side. For consumers, they highlight 1) changes in social values, 2) economic trends related to globalization and the greater involvement of women and younger people in share ownership, 3) increased awareness of social issues due to high-profile campaigns, investigative news reports, and personal finance education, 4) increased direct selling of ethical products by financial advisors, and 5) increased disclosure and recognition of CSR by firms and the way this influences their marketing strategies. Increased disclosure is often achieved through "triple bottom line" accounting, which uses social/ethical and environmental reporting in addition to financial accounting (Norman and McDonald [2004]). This leads to our final specific hypothesis:

> H_{14}: The likelihood that social factors will influence investment decisions will be lower among investors who trust company accounting.

UKSIF identifies the key drivers on the supply side as 1) changes in the law, such as the 1995 Pensions Act and the "SRI Pensions Disclosure Regulation" of 2001; 2) the Charity's Trustee Act of 2000, which highlighted the risks to charities of associating with corrupt firms or governments; 3) the "SRI overlay" by the four largest U.K. insurance companies, who switched the overall balance of their portfolios to SRI products; 4) the increasing recognition of the business case for CSR; and 5) increased demands for good corporate governance from other institutional stakeholders such as company insurers who, following the Association of British Insurers Guidelines of 2002, often require firms to reduce their risk exposure by operating with good CSR.

In Australia, the Mays and BT Financial Group report [2003] argues that SRI provides superior performance for less risk. The report identifies a set of "added value drivers" that enhance shareholder value and encourage SRI. This list includes: 1) enhanced reputation and brand loyalty; 2) better stakeholder relations; 3) employee loyalty, higher productivity, and lower staff turnover; 4) better customer satisfaction and loyalty, which leads to higher sales revenue; 5) overall cost savings; 6) reduced operational risks and threats from mergers and acquisitions; 7) potential alliances with business partners; 8) new business opportunities; 9) access to and lower costs of capital; and 10) reduced need for regulatory intervention. The report suggests there is strong evidence linking ethical and environmental business practices to reduced risk profiles and improved brand reputation. In addition, better workplace practices are strongly linked to enhancing a firm's human and intellectual capital, operational efficiency, and overall revenue and profitability.

These observations, together with the discussion in section 2, suggest that differences may exist in the way SRI decisions are reached in different countries because of the way it has developed in different market contexts. This may be especially true of differences in institutional ownership and in the regulatory environment.

For example, in the U.K., where institutions dominate SRI activity, we would expect individual investors to be less likely to make portfolio decisions in response to social issues since these decisions are delegated to fund managers. There does appear to be an active SRI strategy among many U.K. institutions (see Cox, Brammer, and Millington [2004]). By contrast, in Australia, where direct share ownership is very high, individual investors take on more of the screening activity themselves and may be more responsive to SRI concerns.

As for the regulatory environment, we would expect to see a higher level of SRI activity in countries like the U.S., where regulation is left to the market and to shareholder advocacy initiatives, than in countries like the U.K., where corporate social performance is regulated by government and non-governmental authorities. This leads to the following general hypotheses:

> H_{15}: The likelihood that social factors will influence individual investment decisions will be lower in countries where institutional share ownership is high.
> H_{16}: The likelihood that social factors will influence individual investment decisions will be lower in countries where regulation of corporate social performance by third-party authorities is high.

Empirical Strategy

A General Model of SRI Choice

Given the evidence from the SRI literature, we suggest a simple binary model of investor choice in which the investment decision is affected by the social performance of corporations as follows:

$$Investment\ Decision_i = \begin{cases} 0 \ Not Affected by Social Performance \\ 1 \ Is Affected by Social Performance \end{cases} \quad (1)$$

We hypothesize that the choice variable, *Investment Decision$_i$*, is determined by factors related to: 1) measures of investor attitudes, 2) indicators of investor behavior as a consumer in the wider sense, and 3) individual investor demographics. We parameterize this choice using a binary Probit model that aims to identify which factors influence the probability that an investor will be influenced by social performance. We assign a value of 1 if the investor is affected, and a value of 0 otherwise. We estimate this probability using a cumulative normal density function of the following form:[10]

$$P_i = E(Outcome = 1(SRI)) = F(Z_i) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{Z_i} e^{-t^{2/2}} dt \quad (2)$$

where P_i is the probability that the investor is influenced by social factors, which in turn is conditional on an index Z_i and t, a random variable that is normally distributed with mean 0 and variance 1. The index Z_i is estimated by the following:

$$\begin{aligned} Z_i = F^{-1}(P_n) &= \beta_0 + \beta_1 CSRProfit_i + \beta_{2b} Buddhist_i \\ &+ \beta_{2j} Jewish_i + \beta_{2c} Catholic_i + \beta_{2p} Protestant_i \\ &+ \beta_3 FirmRole_i + \beta_4 Friedman_i \\ &+ \beta_5 Performance_i + \beta_6 \boldsymbol{Punish}_i + \beta_7 Income_i \\ &+ \beta_8 Gender_i + \beta_9 Education_i + \beta_{10} Age_i \\ &+ \beta_{11} WebUse_i + \beta_{12} TownSize_i \\ &+ \beta_{13} Employment +_i \beta_{14} TrustAccounts_i \end{aligned} \quad (3)$$

where F^{-1} is the inverse of the cumulative density function to Equation (2), so that the probability that the investment choice in each case i will be affected by the social performance of firms depends on: 1) *attitudes*, including views about the relationship between good CSR and profits, religious affiliation, the ethical role of firms in society, the importance of shareholders (Friedman [1970]), the level of trust in company accounting, and attitudes toward financial versus social performance; 2) *the behavioral variable Punish$_i$*, which captures the propensity of investors to respond to poor CSR in the marketplace by changing their consumption patterns; and 3) *demographic factors*, including income, gender, education levels, ages, Internet use, community size, and employment at a large firm. Table 4 gives summary statistics for these variables and others used in the study.

We performed a search for the best specification of Z_i using restrictions on the general model in Equation (3), in which insignificant variables from the encompassing equation are excluded on the basis of statistical tests of their explanatory power. This allowed us to find well-specified models in which all the explanatory variables are statistically significant. We test for the influence of market context in Hypotheses 15 and 16 by looking at differences in the structure of the reduced-form equations and by comparing the predictions across countries.

Results

Table 5 gives the results of the Probit estimation. For brevity, we show only the reduced models, but in each case the general model has the same structure as the All Countries model in the first column.

Identifying the Determinants of SRI

One striking feature of the results is that attitudes toward good CSR and company profitability do not appear to be significant for individual countries. This is contrary to claims that SRI is driven by financial considerations, as SRI investors do not appear to differ

Table 4. *Summary Statistics of the Variables*

	All Countries		Australia		Canada		Germany		U.K.		U.S.	
Total Sample	5017		1013		1002		1000		1002		1000	
Shareholders	1980		428		437		429		380		564	
SRI Influenced	475		121		108		78		70		149	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
SRI Investors	0.241	0.428	0.295	0.456	0.257	0.437	0.179	0.384	0.186	0.390	0.268	0.444
Income	3.531	1.261	3.625	1.296	3.398	1.149	3.419	1.362	3.941	1.251	3.400	1.181
Gender	1.452	0.498	1.441	0.497	1.463	0.499	1.463	0.499	1.462	0.499	1.435	0.496
Education	2.350	0.659	2.363	0.724	2.315	0.627	2.407	0.522	2.066	0.860	2.500	0.513
Age	3.621	1.465	3.582	1.466	3.531	1.545	3.409	1.317	3.745	1.524	3.833	1.449
Internet Use	0.781	0.414	0.793	0.405	0.786	0.411	0.721	0.449	0.783	0.413	0.816	0.388
Town Size	2.700	1.104	3.040	1.165	2.610	1.133	2.598	0.778	2.048	0.990	2.981	1.124
Work	0.261	0.439	0.262	0.440	0.199	0.400	0.279	0.449	0.307	0.462	0.268	0.444
Buddhist	0.006	0.075	0.010	0.100	0.008	0.087	0.000	0.000	0.000	0.000	0.009	0.093
Jewish	0.011	0.104	0.013	0.112	0.003	0.050	0.000	0.000	0.007	0.083	0.028	0.166
Catholic	0.258	0.438	0.179	0.384	0.358	0.480	0.353	0.479	0.138	0.345	0.236	0.425
Protestant	0.433	0.496	0.395	0.490	0.353	0.478	0.366	0.482	0.545	0.499	0.519	0.500
Firm Role	0.292	0.455	0.325	0.469	0.322	0.468	0.228	0.420	0.272	0.446	0.303	0.460
Punish	0.467	0.499	0.579	0.494	0.443	0.497	0.448	0.498	0.407	0.492	0.444	0.497
Friedman	2.445	1.079	2.625	1.091	2.423	1.026	2.348	0.943	2.617	1.126	2.281	1.155
Trust Company Accounting	1.998	0.986	2.038	1.052	2.003	0.898	1.847	0.896	2.131	1.099	2.004	0.986
CSR = Profits	2.426	1.036	2.569	1.098	2.353	0.988	2.384	0.904	2.590	1.113	2.299	1.053
Performance	2.628	1.015	2.673	1.019	2.710	1.000	2.473	0.930	2.628	1.081	2.649	1.039

in their beliefs about company performance relative to conventional investors. However, for the All Countries example, this variable is significant and has the expected sign, implying that investors who disagree that good CSR gives higher profits are less likely to be SRI investors.

Other attitudinal and behavioral variables appear to be more important to the ethical investment decision. In five out of six cases, the likelihood that social factors affect the investment decision is significantly affected by investor attitudes to social versus financial performance. Those who place greater or equal weight on social issues are more likely to be influenced by these factors in their investment decisions.

In the U.S., the social performance variable is not statistically significant, but more general attitudes about the role of firms are significant. Respondents who identified "setting high ethical standards" as an important social role of firms are more likely to use this criterion in their investment decisions. In terms of behavior, the $Punish_i$ variable is significant in five cases. Thus, investors who have actively "punished" firms for poor CSR as consumers are likely to do the same as investors. For Germany, this variable was marginally insignificant at the 90% level.

One or two other variables also appear important. In Canada, for example, investors who disagree with Friedman's [1970] view that firms should be more responsible to shareholders than to society are more likely to be SRI investors. In Germany and the U.K., investors who trust company accounting are less likely to be SRI investors; this is also true for the All Countries case.

Another clear result is the relative unimportance of demographic factors. Income appears to have some influence in Australia and Canada, but not elsewhere. Community size is important in Australia. Age appears to be important in Germany, although the importance of social performance appears to increase with age, contrary to Hypothesis 10. In the U.S., Internet use and employment in large firms appears to be important.

Income and religion appear to be significant across all countries, although religion has the opposite sign from what we expected. This may be because members of religious groups invest in funds that already have strict ethical screens, and so may not need to actively change their portfolios because of social performance issues.

Overall, contrary to the findings of several studies (Rosen, Sandler, and Shani [1991], Hayes [2001], Tippet and Leung [2001], and Schueth [2003]), demographics appear to explain very little and most are not statistically significant.

Predicting Likely SRI Investors

We can use our results to make some predictions about appropriate investment strategies for investors based on their attitudes and behavior. This in turn can be useful in profiling SRI investors and marketing SRI products.

Table 6 shows the probability that investors will be influenced by social performance under a number of alternative conditions relating to their attitudes toward social versus financial performance, as well as their propensity to actively punish poor CSR as consumers.

Table 5. *Probit Estimates*

	All Countries	All Countries	Australia	Canada	Germany	U.K.	U.S.
Constant	−1.531 [0.252]***	−1.252 [0.169]***	−1.807 [0.322]***	−2.274 [0.322]***	−1.624 [0.323]***	−1.111 [0.255]***	−1.312 [0.162]***
CSR = Profits	−0.061 [0.031]**	−0.062 [0.030]***	—	—	—	—	—
Buddhist	0.389 [0.381]	—	—	—	—	—	—
Jewish	0.394 [0.290]	—	—	—	—	—	—
Catholic	−0.175 [0.086]**	−0.186 [0.084]**	—	—	—	—	—
Protestant	−0.204 [0.076]***	−0.222 [0.073]***	—	—	—	—	—
Firm Role	0.106 [0.071]	—	—	—	—	—	0.354 [0.126]***
Friedman	−0.038 [0.031]	—	—	0.129 [0.068]*	—	—	—
Performance	0.171 [0.033]***	0.173 [0.031]***	0.225 [0.068]***	0.200 [0.070]***	0.184 [0.076]**	0.146 [0.072]**	—
Punish	0.413 [0.066]***	0.424 [0.064]***	0.651 [0.144]***	0.392 [0.136]***	—	0.481 [0.155]***	0.434 [0.119]***
Income	0.076 [0.028]***	0.081 [0.025]***	0.183 [0.057]***	0.154 [0.060]**	—	—	—
Gender	0.030 [0.065]	—	—	—	—	—	—
Education	0.079 [0.053]	—	—	—	—	—	—
Age	0.033 [0.023]	—	—	—	0.182 [0.055]***	—	—
Internet Use	−0.031 [0.088]	—	—	—	—	—	0.360 [0.161]**
Town Size	0.004 [0.029]	—	−−0.157 [0.058]***	—	—	—	—
Employment	0.072 [0.075]	—	—	—	—	—	0.247 [0.130]*
Trust Accounting	−0.073 [0.033]**	−0.072 [0.032]**	—	—	−0.220 [0.082]***	−0.200 [0.076]***	—
R^2	0.069	0.062	0.115	0.087	0.055	0.065	0.064
K-L R^2	0.062	0.056	0.104	0.072	0.056	0.062	0.053
% Correct	76.1	76.1	71.5	77.3	81.8	81.6	73.9

Notes: Standard errors are in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. K-L = Kullback-Leibler R^2.

The top panel shows that investors concerned about CSR as consumers are more likely to be influenced by social factors in their investment choices. In some cases, this is quite striking. For example, in Australia and the U.K., CSR-active consumers are more than twice as likely than less active consumers to be SRI investors. The results are similar in Canada and the U.S. But there is no difference in Germany, as we expect, since the $Punish_i$ variable is marginally insignificant.

The impact of social performance can also be gauged using the Probit estimates. In the second panel, CSR-active consumers who believe social performance is very important are more than twice as likely to be SRI investors in all countries. The third panel shows that investors who are less active as consumers are nearly three times as likely to be SRI investors if they care a great deal about social performance. However, overall, they are less likely to be SRI investors. Comparing panels 2 and 3 shows that CSR-active consumers are more likely to be SRI investors even if they are neutral or disagree with the view that financial aims are not as important as social aims.

Market Context and SRI

Our results also show some differences across countries, which may be associated with the contextual differences discussed earlier. For example, the results for the likelihood that social issues will influence U.K. investors are lower than those in other countries. This does not appear to be because U.K. investors are less concerned about these issues, however, since the average responses in Table 4 are similar or greater for U.K. respondents. Instead, it appears to support

Table 6. *Probability that Social Performance Influences Investment*

	All countries	Australia	Canada	Germany	U.K.	U.S.
			Punish			
Have	30.0%	35.6%	30.7%	17.0%	25.1%	34.1%
Have Not	17.1%	15.4%	18.5%	17.0%	12.4%	19.9%
		Impact of Performance for CSR-Active Consumers (Punish)				
1	21.0%	22.8%	19.9%	—	18.1%	—
2	26.3%	30.2%	25.9%	—	22.2%	—
3	32.2%	38.4%	32.8%	—	26.8%	—
4	38.7%	47.2%	40.3%	—	31.8%	—
5	45.4%	56.2%	48.2%	—	37.2%	—
		Impact of Performance for Non-CSR-Active Consumers (Not Punished)				
1	10.9%	8.1%	10.8%	11.0%	8.2%	—
2	14.5%	12.1%	15.0%	14.9%	10.7%	—
3	18.8%	17.2%	20.1%	19.5%	13.6%	—
4	23.8%	23.5%	26.2%	25.0%	17.0%	—
5	29.5%	31.0%	33.1%	31.2%	21.0%	—

Notes: Estimates are based on the Probit models in Table 5 using the average values for the explanatory variables shown in Table 3. The performance index is taken from the question on the relative importance of social versus financial performance of firms, H_5 in Table 4. The higher the index, the more investors care about social performance.

Hypotheses 15 and 16, suggesting that the dominance of institutions in the U.K., as well as the SRI overlay imposed by formal regulations, means that social issues are effectively delegated to fund managers. Thus U.K. investors may not need to be as active on social issues.

In contrast, in Australia and Canada, where the investment market is less dominated by funds and where direct share ownership is more common, SRI issues have a greater impact on shareholder behavior. This is clearly an area where further research may prove fruitful since it is necessary to distinguish between these potential explanations and to identify any other important contextual factors.

Discussion and Conclusions

We have reported evidence from five countries that a significant portion of investors consider a company's social and environmental behavior when making investment decisions. Our results show that investor characteristics as consumers and their general attitude toward the social aims of firms appear to influence their investment choices. Financial returns and demographic characteristics, however, appear to have very little power in explaining the SRI choice.

Our results also support the view that the market context is important. Investors in the U.K., for example, where most investment is intermediated through a pension or insurance fund, appear to be less active as SRI investors than in Australia, where direct share ownership is more common.

The results show it is possible to use the methodology applied here to credibly predict whether an individual investor will choose SRI products. In principle, this calls into question sales strategies based solely on financial returns and demographics, and opens the prospect that our approach could be a useful tool for practitioners for SRI marketing and financial consulting.

Further research into the behavioral aspects of SRI may prove useful. One obvious avenue is investigating the determinants of investor types and any link they may have to SRI choices. Another area not covered here might focus on the risk characteristics of SRI investors, to see if this sheds any light on the debate surrounding investor choices and the financial performance of SRI portfolios. Finally, the links between market context, regulation, and SRI activism might be investigated further to help guide policy and provide a better understanding of the future development of SRI in different markets.

Acknowledgments

I thank Graham Owens for excellent research assistance and Jeremy Cheah for comments on the early stages. GlobeScan Ltd provided preferential access to their database for which I am also grateful. The views expressed are those of the author and do not necessarily reflect those of GlobeScan Ltd. All errors remain the responsibility of the author.

Notes

1. Financial services wishing to support the fields of environmental, ethical, or social investment policy can also use the services of several research agencies, including imug, oekom research, scoris (sirigroup), and Suedwind, among others. The www.ecoreporter.de website, begun in 1999, provides news

and information about the SRI sector. In September 1999, the "Gruenes Geld" fair for sustainable investment was held for the first time. Its success as a market platform for both suppliers and investors has led to a series of annual events.

2. Nine providers of stakeholder pension schemes advised UKSIF that they offered a socially responsible investment fund in September 2001. For further details, see the page, "Your Pension," on the EIRIS website.
3. Shareholder influence on company behavior is likely to be a key feature of future ethical investment. The first resolution on social and environmental policy was proposed at the 1997 Shell AGM by corporate governance specialists Pensions and Investment Research Consultants and the church-based Ecumenical Council for Corporate Responsibility. Shareholders representing 17% of Shell's share capital withheld their support from the company on the resolution. In 2001, shareholder resolutions were tabled at the BP Amoco and Balfour Beatty AGMs.
4. These organizations include: Ethical and Environmental Screening Services (EESS); Ethical Investment Research Service (EIRIS); Global Risk Management Services (GRMS); Innovest Strategic Value Advisers; The Manifest Voting Agency; National Association of Pension Funds Voting Issues Service; Pensions Investment Research Consultants (PIRC); and Safety and Environmental Risk Management (SERM). The UKSIF was a founding member of the European Social Investment Forum (EIF). Specialist independent financial advisers, such as members of UKSIF and the Ethical Investment Association (www.ethicalinvestment.org.uk), help market and distribute these investments. A number of U.K.-based investment managers employ in-house staff dedicated to analysis or corporate governance work on SRI issues. Such investment managers include but are not restricted to AEGON Asset Management, Friends Ivory & Sime, Henderson Global Investors (part of AMP), Jupiter Asset Management (part of Commerzbank), and Morley Fund Management (part of CGNU). In addition, some investment banks ("brokers") are beginning to include SRI issues in the research they supply to clients, and many investment institutions have either expanded their in-house SRI teams or hired their first analysts working solely on SRI issues.
5. See http://www.iccr.org/about/.
6. See UK Social Investment Forum, "Response of UK Pension Funds to the SRI Disclosure Regulation," www.uksif.org/publications/reprt-2000-10/frameset.shtml.
7. Sparkes [2002] estimates that as of September 2001 there were £120 billion (U.S. $229 billion) in institutional funds that are actively implementing an SRI policy (as opposed to those simply conforming to regulations). This figure is up from £52 billion (U.S. $95 billion) in December 1999. A large part of the growth was due to an increase in SRI in pension funds, from £25 billion (U.S. $46 billion) in December 1999, to £85 billion (U.S. $156 billion) in October 2001. The value of SRI in church and charity investments was estimated at £31.4 billion (U.S. $57.5 billion) (Sparkes [2002]). New guidelines were also introduced in the insurance market in October 2001.
8. 39% of Australian adults own shares directly, according to the most recent Australian Stock Exchange survey (ASX [2005]).
9. These differences may be due to methodological problems. For example, McWilliams and Siegel [2000] and McWilliams, Siegel, and Teoh [1999] suggest that many studies on comparative returns may be vitiated by statistical errors. Brammer and Pavelin [2005] suggest that the relationship between corporate reputation and performance must take into account a wider range of factors than is usual in the finance literature.
10. This is a standard methodology discussed in many econometric texts (see, for example, Maddala [1983] and Gujarati [1995].

References

Australian Stock Exchange (ASX). *International Share Ownership: Comparison of Share Owners*. Sydney: Australian Stock Exchange, 2005.

Bauer, R., K. Koedijk, and R. Otten. "International Evidence on Ethical Mutual Fund Performance and Investment Style." *Journal of Banking and Finance*, 29, (2002), pp. 1751–1767.

Brammer, S. and S. Pavelin Brammer. "Corporate Reputation and an Insurance Motivation for Corporate Social Investment." *Journal of Corporate Citizenship,* 20, (2005).

Brammer, S., G.A. Williams, and J. Zinkin. "Religion and Attitudes to Corporate Social Responsibility in a Large Cross-Country Sample." Nottingham University Business School (U.K.), Malaysia Campus, 2005.

Chambers, E., W. Chapple, J. Moon, and M. Sullivan. "Corporate Social Responsibility in Asia: A Seven Country Study of CSR Website Reporting." *Business and Society*, 44, 4, (2003), pp. 415–441.

Clark-Murphy, M., and G. Soutar. "Individual Investor Preferences: A Segmentation Analysis." *Journal of Behavioral Finance*, 6, 4, (2005), pp. 6–14.

Coupland, C. "Corporate Identities on the Web: An Exercise in the Construction and Deployment of 'Morality'." Research Paper No. 02-2003, ICCSR, Nottingham University Business School, U.K, 2003.

Coupland, C., and A.D. Brown. "Constructing Organizational Identities on the Web: A Case Study of Royal Dutch Shell." *Journal of Management Studies*, 41, 8, (2004), pp. 1325–1348.

Cox, P., S. Brammer, and A.I. Millington. "An Empirical Examination of Institutional Investor Preferences for Corporate Social Performance." *Journal of Business Ethics,* 52, 1, (2004), pp. 27–43.

Crane, A., and S. Livesey. "Are You Talking to Me? Stakeholder Communication and the Risks and Rewards of Dialogue." In J. Andriof, S. Waddock, S. Rahman, and B. Husted, eds., *Unfolding Stakeholder Thinking*. Sheffield, U.K.: Greenleaf Publishing, 2002.

Cummings, L.A. "The Financial Performance of Ethical Investment Trusts: An Australian Perspective." *Journal of Business Ethics*, 25, 3, (2000), pp. 167–177.

Domini, A. *Socially Responsible Investing: Make Money While You Make a Difference* Chicago: Dearborn Financial Publishing, 2001.

Dowell, G., S.L. Hart, and B. Yeung. "Do Corporate Global Environmental Standards Create or Destroy Market Value?" *Management Science*, 46, 8, (2000), pp. 1059–1074.

Ellmen, E. *The Canadian Ethical Money Guide*. Toronto: James Lorrimer & Co., 1996.

Esrock, S., and G.B. Leichty. "Social Responsibility and Corporate Web Pages: Self-Presentations or Agenda Setting?" *Public Relations Review*, 24, 3, (1998), pp. 305–319.

Ethical Investment Association (EIA). *Socially Responsible Investment in Australia—2004*. Sydney, NSW: Ethical Investment Association, 2004.

European Sustainable and Responsible Investment Forum (Eurosif). *Socially Responsible Investment among European Institutional Investors*. Paris: Eurosif, 2003.

Freeman, R.E. *Strategic Management: A Stakeholder Approach*. Boston: Pitman Advanced Publishing Program, 1984.

Freeman, R.E. "The Politics of Stakeholder Theory: Some Future Directions." *Business Ethics Quarterly,* 4, 40, (1994), pp. 409–429.

Friedman, M. "The Social Responsibility of Business is to Increase its Profits." *New York Times Magazine*, September 13, (1970), pp. 32–33.

Gompers, P., J. Ishii, and A. Metrick. "Corporate Governance and Equity Prices." *Quarterly Journal of Economics*, 118, 1, (2003), pp. 107–155.

Goyen, M., P. Phillips, and D.J. Beal. "Why Do We Invest Ethically?"*Journal of Investing,* Fall 2005.

Grossman, B., and W. Sharpe. "Financial Implications of South Africa Divestment." *Financial Analysts Journal*, 42, July/August, 1986.

Guenster, N., J. Derwell, R. Bauer, and K. Koedijk. "The Economic Value of Corporate Eco-Efficiency." Working paper, Erasmus University, 2005.

Gujarati, Damodar. *Basic Econometrics*, Literatür Yayıncılık, Istanbul, 1995.

Hamilton, S., H. Jo, and M. Statman. "Doing Well While Doing Good? The Investment Performance of Socially Responsible Mutual Funds." *Financial Analysts Journal*, 49, 6, (1993), pp. 62–66.

Hayes, J. "The Greater Good: How Ethical Investment Pays Off." *Australian Financial Review,* 26-7, (2001), pp. 29–31.

Hofstede, G., and J.-G. Hofstede. *Cultures and Organizations: Software of the Mind*. New York: McGraw-Hill, 2005.

Investment Company Institute (ICI). *Fundamentals: Investment Company Institute Research in Brief.* Washington: Investment Company Institute, Vol. 13, 3, 2005.

Katz, J.P., D.L. Swanson, and L.K. Nelson. "Culture-Based Expectations of Corporate Citizenship: A Propositional Framework and Comparison of Four Cultures." *International Journal of Organizational Analysis*, 9, 2, (2001), pp. 149–171.

Knowles, R., ed. *Ethical Investment*. Marrickville, NSW: Choice Books, 2000.

KPMG. *KPMG International Survey of Corporate Responsibility Reporting*. Amsterdam: KPMG Corporate Sustainability Services, KPMG International, 2005.

Lewis, A. *Morals, Markets and Money: Ethical, Green and Socially Responsible Finance*. London: Financial Times/Prentice-Hall, Pearson, 2002.

Lewis, A., and C. Mackenzie. "Morals, Money, Ethical Investing and Economic Psychology." *Human Relations*, 53, 2, (2000), pp. 179–191.

Lydenberg, S.D. "Envisioning Socially Responsible Investment: A Model for 2006." *Journal of Corporate Citizenship*, 7, (2002), pp. 57–77.

Mackenzie, C., and A. Lewis. "Morals and Markets: The Case of Ethical Investing." *Business Ethics Quarterly*, 9, 3, (199), pp. 439–452.

Mathieu, E. *Response of UK Pension Funds to the SRI Disclosure Regulation*. London: UK Social Investment Forum, 2000.

Mays, S., and BT Financial Group. *Corporate Responsibility: An Investor Perspective – The Mays Report*. Canberra, Australia: Department of Environment and Heritage, 2003.

McLachlan, J., and J. Gardner. "A Comparison of Socially Responsible and Conventional Investors." *Journal of Business Ethics,* 52, (2004), pp. 11–25.

Maddala, G. S. *Limited Dependent and Qualitative Variables in Econometrics* Cambridge: Cambridge University Press, 1983.

McWilliams, A. and D. Siegel, D. "Research Notes on Communication, Corporate Social Responsibility and Financial Performance: Correlation or Miss-specification?" *Strategic Management Journal*, 21, (2000), pp. 603–609.

McWilliams, A., D. Siegel, S. Teoh. "Issues in the Use of the Event Study Methodology: A Critical Analysis of Corporate Social Responsibility Studies." *Organizational Research Methods*, 2, 4, (1999), pp. 340–65.

Michelson, G., N. Wailes, S. van der Laan, and G. Frost. "Ethical Investment Processes and Outcomes." *Journal of Business Ethics,* 52, (2004), pp. 1–10.

Mohr, L.A., D.J. Webb, and K.E. Harris. "Do Consumers Expect Companies to be Socially Responsible? The Impact of Corporate Social Responsibility on Buying Behaviour." *Journal of Consumer Affairs*, 35, 1, (2001), pp. 45–72.

Naber, M. "How Then Shall We Invest?" *Christianity Today*, 45, 11, 2001a.

Naber, M. "Catholic Investing: The Effects of Screens on Financial Returns." *Journal of Investing*, Winter, 2001b.

Nesbitt, S. "Long-Term Rewards from Shareholder Activism: A Study of the CalPERS Effect." *Journal of Applied Corporate Finance*, Winter, (1994), pp. 75–80.

Newbold, P. *Statistics for Business and Economics*, New Jersey: Prentice-Hall Inc, 1995.

Norman, W., and C. MacDonald. "Getting to the Bottom of 'Triple Bottom Line'." *Business Ethics Quarterly,* 14, (2004), pp. 243–262.

O'Neil, R.F., and D.A. Pienta. "Economic Criteria versus Ethical Criteria Toward Resolving a Basic Dilemma in Business." *Journal of Business Ethics*, 13, (1994), pp. 71–78.

Orlitzky, M., F.L. Schmidt, and S.L. Rynes. "Corporate Social and Financial Performance: A Meta-Analysis." *Organization Studies*, 24, 3, (2003), pp. 403–411.

Rosen, B.N., D.M. Sandler, and D. Shani. "Social Issues and Socially Responsible Investment Behaviour: Preliminary Empirical Investigation." *Journal of Consumer Affairs*, 25, 2, (1991), pp. 221–234.

Russo, M.V., and P.A. Fouts. "A Resource-Based Perspective on Corporate Environmental Performance and Profitability." *Academy of Management Journal,* 40, 3, (1997), pp. 534–559.

Scholtens L.J.R., and P. Sprengres. *Socially-Responsible Savings and Investments in the Netherlands: Developments in Volume and Growth between 1987 and 2000*. Culemborg, The Netherlands: Dutch Association of Investors for Sustainable Development (VBDO), 2001.

Schueth, S. "Socially Responsible Investing in the United States." *Journal of Business Ethics,* 43, (2003), pp. 189–194.

Social Investment Forum (SIF). *2003 Report on Socially Responsible Investing Trends in the United States*. Washington: Social Investment Forum, 2003.

Social Investment Organisation (SIO). *Canadian Social Investment Review 2004*. Toronto: Social Investment Organisation, 2005.

Sparkes, R. *Socially Responsible Investing: A Global Revolution.* Chichester, U.K.: John Wiley & Sons, 2002.

Sparkes, R., and C.J. Cowton. "The Maturing of Socially Responsible Investment: A Review of the Developing Link with Corporate Social Responsibility." *Journal of Business Ethics*, 52, (2004), pp. 45–57.

Sproles, G.B., 1985. "From Perfectionism to Faddism: Measuring Consumers' Decision Making Styles." *Proceedings of the American Council on Consumer Issues*, (1985), pp. 79–85.

Sproles, G.B., and E.L. Kendall. "A Methodology for Profiling Consumers' Decision-Making Styles." *Journal of Consumer Affairs*, 20, (1986), pp. 267–279.

Stone, B.K., J.B. Guerard Jr., M.N. Gultekin, and G. Adams. "Socially Responsible Investing: Strong Evidence of No Significant Cost for Actively Managed Portfolios." Working paper, June 2001.

Teoh, S.H., I. Welch, and C.P. Wazzan. "The Effect of Socially Activist Investment Policies on the Financial Markets: Evidence from the South African Boycott." *Journal of Business*, 72, 1, (1999), pp. 35–89.

Thaler, R., 1980. "Toward a Positive Theory of Consumer Choice." *Journal of Economic Behaviour and Organisation*, 1, 1, (1980), pp. 39–60.

Tippet, J. "Performance of Australia's Ethical Funds." *Australian Economic Review*, 34, 2, (2001), pp. 170–178.

Tippet, J., and P. Leung. "Defining Ethical Investment and its Demography in Australia." *Australian Accounting Review*, 11, 3, (2001), pp. 44–55.

United Kingdom Social Investment Forum (UKSIF). *Response of UK Pension Funds to the SRI Disclosure Regulation*. London: UK Social Investment Forum, 2000.

Waddock, S.A., and S.B. Graves. "Finding the Link between Stakeholder Relations and Quality of Management." *Journal of Investing*, 6, 4, (1997), pp. 20–24.

Waddock, S.A., and S. B. Graves. "The Corporate Social. Performance–Financial Performance Link," *Strategic Management Journal*. 18(4) (1999).

Waddock, S.A., S.B. Graves, and R. Gorski, 1998. "Social and Traditional Investment: Stakeholder and Performance Characteristics." *Investment Research Guide to Socially Responsible Investing*. The Colloquium on Socially Responsible Investing, 1998.

Webley, P., A. Lewis, and C. Mackenzie, 2001. "Commitment Among Ethical Investors: An Empirical Approach." *Journal of Economic Psychology*, 22, 1, (2001), pp. 27–42.

Wilcox, R.T., 1999. "Efficient Fee Structures for Mutual Funds." *Sawtooth Software Conference Proceedings*, San Diego, (1999), pp. 71–97.

Williams, G., and J. Zinkin, 2005a. "Can Corporate Social Responsibility Be a Bridge Between Civilisations?" http://www.geoffwilliams.org/Research.htm , 2005a.

Williams, G., and J. Zinkin. "The Effect of Culture on Consumers' Willingness to Punish Irresponsible Behaviour: Applying Hofstede's Typology to the Punishment Aspect of Corporate Social Responsibility." http://www.geoffwilliams.org/Research.htm, 2005b.

Williams, S.M., and C.W.P. Ho. "Corporate Social Disclosures by Listed Companies on Their Websites: An International Comparison." *International Journal of Accounting*, 34, 3, (1999), pp. 389–419.