

Chapter 2

Profiling Ethical Investors

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Abstract In the previous chapter we highlighted the important growth experienced by SRI especially remarkable after the 2008 financial crisis. In this context of growth it is important to know the profile of the important emerging group of investors willing to invest with social responsibility criteria, especially in countries like Spain, where this kind of investment is still marginal compared with countries like Australia which has a long SRI tradition. This chapter presents the results from a study designed to examine financial preferences, social, environmental, governance and ethical concerns and, socio-demographic characteristics and motivation of socially responsible investors. Based on an international online survey we analyse the degree of influence of a number of socio-demographic variables on the propensity for being a socially responsible investor. The study can be of great value for marketing researchers, institutional investors and fund managers attempting to identify those investors more receptive to SRI products. The information can also be used by advertising researchers to develop effective advertising campaigns.

2.1 Introduction

In the previous chapter we have seen how the SRI industry has experienced rapid growth in recent times. The presented figures indicate that the importance of the SRI industry is growing fast and is becoming a phenomenon that has to be taken seriously into account by both researchers and business experts (Nilsson 2008). However, factors leading investors to choose SRI products are not still

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well understood. As we have also seen in the previous chapter, we cannot find a precise and common definition of Socially Responsible Investing (SRI) as this concept depends on cultural and historical aspects. Therefore it is difficult to identify a homogeneous market for SRI: national markets vary considerably in terms of growth, investment strategies and asset allocation, and whether the investment is retail or institutional, which represents a challenge for both, investors and asset managers (EUROSIF 2012). Asset managers need to know the main characteristics of the national SRI markets in order to offer products depending on local investors' preferences. In this chapter we will focus on two markets with a different level of SRI development: the Australian and the Spanish markets.¹

2.1.1 The Australian SRI Market

In Australia, the mainstream movement began in 1981 with the establishment of August Investment Proprietary Limited (in 1989, it became the Australian Ethical Investment Trust). In 1999, the Ethical Investment Association (EIA) was founded. Among other things, the EIA instigated a series of SRI benchmarking reports in Australia, supported by private stakeholders and the Australian Government Department of Environment and Heritage. The EIA changed its name in 2007, becoming the Responsible Investment Association Australasia (RIAA). Nowadays, in Australia, eight of the top ten investment managers have signed the UN Principles for Responsible Investment. In 2013, RIAA presented data on the state of the industry. Total funds under management in responsible investment portfolios at the end of 2012 totaled \$152 billion, or approximately 16 % of total assets under management. Compared to 2011, responsible investment funds under management increased by 30 % in dollar terms, from \$117 billion to \$152 billion (RIAA 2013).

In Australia, ESG Integration has proven to be the dominant method of responsible investment, representing 89 % of the overall market total (\$135 billion). ESG Integration has produced the largest growth, witnessing a 33 % increase in total funds under management between 2011 and 2012. Other approaches, such as community investments and sustainability themed investments, have also seen considerable growth in funds under management in the last year (19 and 16 % respectively), although they remain a relatively small portion of total responsible investments. The total number of funds that use a screening approach to investments, which includes most of the ethical funds, also showed a slight overall increase of funds under management of 2 %.

¹This chapter is closely related to and heavily based on Pérez-Gladish et al. (2012) published in the Australian Journal of Management.

Corporate advocacy and shareholder engagement have not been yet taken into account widely in Australia. Nevertheless, proportionally, funds with corporate advocacy as a primary approach have increased by 33 %.

Most fund managers consider engagement with companies on ESG issues as an integrated part of their investment approach, but would not identify this as the primary responsible investment approach. Corporate advocacy investment strategies include portfolios that have been specifically constructed with the aim of influencing corporate behaviour with regard to ESG issues. Until recently these portfolios have attracted relatively small funds (RIAA 2013).

The RIAA also reports that relative to the general market, responsible investment funds have grown more strongly or fallen less sharply than the overall market in the post-global financial crisis period, highlighting their lower volatility and greater resilience in the face of tumultuous markets.

2.1.2 The Spanish SRI Market

In Spain, and according to EUROSIF (2012), all aspects of the economy have been affected by the 2008 economic recession, and the asset management industry has unsurprisingly not been immune to these negative shocks. The overall asset management market in Spain has seen total assets under management decline considerably over the past several years, triggered in large part by contagion effects from the global financial crisis of 2007–2008, as well as the steep corrections experienced in the overheated local housing and commercial real estate market. For instance, the total assets under management of the broader Spanish asset management industry have declined by over 31 % since their peak in 2007, when total assets under management reached 414.6 billion euros. The downward trend has continued over the past year as total assets declined by an additional 6 % to reach 284.7 billion euros at the close of 2011.

Despite this very difficult economic context, or perhaps because of it, the SRI market continues to gain traction in Spain. However, the Spanish market remains considerably less developed than many of its Northern European neighbours and continues to struggle to unleash the untapped potential that many analysts have been predicting for several years given the size and sophistication of the broader Spanish asset management industry. It remains a niche investment strategy dominated by a few large institutional investors, in particular large occupational pension funds.

Each of the different responsible investment strategies has demonstrated growth in Spain, a sign of the growing maturity of the market. Several strategies have in fact experienced a dramatic growth over the 2-year period from 2009 to 2011. For instance, the integration of ESG factors into financial analysis and engagement and voting strategies on sustainability matters have both seen their volume of activity more than double, when measured by the total assets under management they cover. The increased shareholder activism around ESG issues in Spain has been mainly driven by several big institutional players, including the two main trade unions and a

number of large employers, particularly in the financial sector. As in previous years, the main issues targeted during the voting processes center around governance and executive compensation issues and less frequently touch upon the environmental and social stewardship of the targeted companies, although exceptions exist. Direct engagement with companies regarding ESG issues remains relatively underutilized in Spain, although it has been increasing in recent years. Indirect engagement with asset managers regarding their SRI investment practices is more common and is practiced by several large occupational pension funds.

While the Spanish SRI market has gained in sophistication in recent years, as evidenced by the increasing use of more complex strategies, exclusions of holdings remains the most common strategy, accounting for 56.2 billion euros in assets under management. Growth in the use of this strategy continues to be quite robust as the total assets under management employing this strategy has more than doubled since 2009. Weapons are the most common form of exclusion criteria in the Spanish SRI market, followed by vice exclusions such as pornography, tobacco, gambling and alcohol. The use of Norm-based exclusions has grown modestly in Spain but is used less widely than more traditional exclusions filters. Sustainability themed investment has grown slightly in recent years but remains a less widely used SRI strategy, although it is expected to gain in prominence in the near future.

While the overall responsible investment market in Spain remains small, it has shown surprising resilience given the poor performance in recent years of the overall asset management industry in Spain, as evidenced by the steep declines experienced among Spanish mutual and pension funds over the past several years. While over the past 2 year period there have been large gains in SRI market penetration, albeit from very low levels, these gains are due mainly to large and dramatic reductions in the volume size of mutual fund market in Spain, which fell from 163.2 billion euros in 2009 to 127.8 billion euros in 2011. Few commentators disagree on the fact that there is ample room for growth in Spain.

The Spanish responsible investment market is overwhelmingly dominated by large institutional investors who account for 97 % of total assets under management. Of these, by far the most active and dominant market participants are large occupational pension funds that remain the main drivers of the market in Spain. Retail specific SRI funds remain very marginal due in large part to a lack of interest and awareness from individual investors. This is not surprising given the risk profile of the average Spanish investor who tends to be very conservative, favouring fixed income and/or traditional bank deposits over equities. The recent growth of ethical banking options in Spain as well as the launching of several new retail SRI mutual funds is expected to jumpstart growth in the retail end of the SRI market in the mid-term. Nevertheless, it is not envisaged that the Spanish SRI market reaches the level of retail market penetration seen in other leading European countries (EUROSIF 2012).

2.2 Literature Review

Several studies have examined the demographics of socially responsible investors (SR-investors): gender, age, education, place of residence and income. These studies mostly refer to investors from countries where SRI is a well-established investment practice (i.e. UK, U.S. and Australia).

Rosen et al. (1991) used a mail survey of 4,000 investors in two US mutual funds that incorporate social screens in their investment decisions, the Calvert Social Investment Fund and the Working Assets Money Fund. In their sample, the average age of the SR-Investors was 39 years. They had median household annual incomes of \$39,000. SR-Investors were mostly higher-degree educated, with 60 % having graduate degrees. Regarding employment, 81 % of SR-Investors are in white-collar jobs. Rosen et al. (1991) compared their results with those from an in-house 1986 study corresponding to conventional investors. SR-Investors were younger, better educated, but less affluent than the conventional investors.

More recently, Junkus and Berry (2010) survey a large group of US-based, well-informed, individual investors, members of the American Association of Individual Investors. They find that the typical SR-Investor is female and more likely to be single, younger, less wealthy, and better educated than their non-SR counterparts.

Woodward (2000) provided an analysis of SR-Investors and the criteria that these investors use as part of the investment decision process. It was based upon a questionnaire survey sent to two groups during the period October 1997 to January 1998. The first group consisted of 388 known SR-Investors. The second group consisted of 650 individuals drawn from a population of 2,421 potential investors who had requested a copy of the Holden Meehan Guide to Ethical Investment (1996). Woodward identified that a typical SR-Investor is likely to be middle aged, with over 78 % being between 36 and 65 years old. Further, they are highly qualified, as 83 % hold a first degree or higher academic qualification and 86 % are either professional or in managerial occupations. However, the annual income for over 60 % of these investors is less than £25,000 (data for 1996), which is a relatively low income level. Based upon the sample there is an approximately even gender split of SR-Investors – 52 % are male and 67 % of SR-Investors have children. Lewis and Mackenzie (2000) employed questionnaire data from 1,146 UK SR-Investors. Summarizing, their socio-demographic data showed SR-Investors are frequently middle-aged and middle-income professionals.

One of the issues studied by Nilsson (2008) was the relation between socio-demographic factors and the amount of investment in SRI mutual funds. Specifically, a questionnaire was answered by 439 SR-investors and 89 conventional Swedish investors. Gender showed a significant impact on how much was invested in SRI – men have a tendency to invest a smaller proportion in SRI. Education also proved a significant predictor of SR-investment behavior as consumers without a university degree invested less in SRI. The other three socio-demographic variables (income, place of residence, and age) did not significantly impact SR-Investors' behavior.

Several authors have studied the socio-demographic characteristics of SR-Investors in an Australian setting – including Beal and Goyen (1998), Haigh (2007), McLachlan and Gardner (2004), Tippet (2001), Williams (2007), and Pérez-Gladish et al. (2012). Beal and Goyen (1998) aimed to determine why people chose to invest in an Australian public nature conservation company “Earth Sanctuaries Ltd” (ESL), whose mission was to conserve ecosystems and to breed endangered species. A total of 825 investors were surveyed in their study. Their results show how ESL shareholders were generally older and more likely to be female than the total shareholder population. They were more likely to be metropolitan residents than regional and with significantly higher levels of education, socio-economic status and household assets.

Tippet (2001) used different groups of investors in his study: 122 responses came from members of the Australian Shareholders’ Association, 57 responses came from clients of a private financial adviser specializing in ethical investment, and 79 responses came from members of the equity-investing Australian public. Their results showed that SR-Investors were more likely to be female (61 %) and tended to be younger (only 23 % were aged 55 years or more, and almost 40 % were much younger, aged between 35 and 44 years old). SR-Investors also showed to be better educated (77 % having a degree or higher degree qualifications).

In contrast, McLachlan and Gardner (2004) found no evidence of differences in age, education level, or income for Australian SR-Investors (based on a comparative examination of 55 conventional and 54 SR-Investors). However, conventional investors dominated SR-Investors in the two age categories at the extreme ends of range (16–25 and >65), while SR-Investors dominated conventional investors in the mid-range categories. Also SR-Investors were not found to have higher education levels than conventional investors. However, the modal pattern suggested that SR-Investors might have had somewhat higher education levels.

Pérez-Gladish et al. (2012) examine financial preferences; social, environmental and ethical concerns; and socio-demographic characteristics of Australian socially responsible investors. With the aid of an online survey and based on a sample of 145 investors they find that SR-Investors tend to be middle-aged, be middle-income professionals and have tertiary qualifications.

Other authors, as Williams (2007) or Haigh (2007) present cross-country studies. Williams (2007) includes in this work five countries: Australia, Canada, Germany, the UK and the US. Generally, the results showed demographic factors not to be significant. Income appeared to have some influence in Australia and Canada, but not elsewhere. Community size was important in Australia. Age appeared to be important in Germany, although the importance of social performance appears to increase with age, contrary to the author’s hypothesis. Income appeared to be significant across all countries with SR-Investors having higher income levels than conventional investors. Overall, contrary to the findings of several studies (Rosen et al. 1991; Tippet 2001), in Williams (2007) demographics appear to explain very little and, in general, the results are not statistically significant, as in McLachlan and Gardner (2004). Getzner and Grabner-Kräuter (2004) find that SR-Investors tend to have higher levels of income and education.

Table 2.1 Main conclusions about socio-demographic characteristics of SR-Investors compared to conventional investors

Authors	Age	Gender	Income level	Educational level
Rosen et al. (1991)	Younger	Not statistically significant	Lower levels	Higher levels
Beal and Goyen (1998)	Older	Female	Higher levels	Higher levels
Tippet (2001)	Younger	Female	Not statistically significant	Higher levels
McLachlan and Gardner (2004)	Middle aged	Not statistically significant	Not statistically significant	Higher levels
Getzner and Grabner-Kräuter (2004)	Not statistically significant	Not statistically significant	Higher levels	Higher levels
Williams (2007)	Not statistically significant	Not statistically significant	Not statistically significant	Not statistically significant
Haigh (2007)	Not statistically significant	Male	Not statistically significant	Higher levels
Pérez-Gladish et al. (2012)	Middle aged	Not statistically significant	Middle income	Higher levels

Source: Own elaboration

Haigh (2007) used an internet questionnaire survey completed by 382 respondents, current and former social investors from Australasia, North America and Europe. His results were in line with previous literature findings. A slight majority of the respondents were male (55 %), while most were living alone (78 %). A range of ages was displayed (27 % under 35 years) and 68 % had completed a form of postgraduate education. More recently, Cañal-Fernández and Caso (2013) present a first preliminary study analyzing the individual investors' behavior in regard to the investment decision based on social responsibility criteria, establishing a classification of investors in Rational, Universal and Social investors. Using the online survey conducted in Spain in 2009 (see Pérez-Gladish et al. (2012) and the results of a Multiple Factor Analysis) they find that Spanish Social investors tend to be young men with higher education, with family responsibilities, religious, and with a middle income level. In this chapter we further exploit the results of the online survey comparing socio-demographic characteristics of socially responsible and conventional investors by means of a logistic regression. Table 2.1 summarizes the main conclusions about socio-demographic characteristics of SR-Investors compared to conventional investors.

The above results must be treated with caution given the heterogeneity of the characteristics of the studies: size of the sample, sample selection and countries. The present work tries to fill an existing gap in the literature concerning the socio-demographic profile of the Spanish SR-investors. We analyse the degree of influence of several demographic variables on SRI.

To build competitive advantage both in the short and in the long term, mutual fund managers need to know the characteristics of the market from both sides: demand and supply. Knowledge of the market, in particular of the demand characteristics, can aid in better achieving both strategic and tactical objectives. For strategic purposes, it can be used to prioritize market segment opportunities. For tactical purposes, it can help in implementing communication and advertising plans. In a market as the Spanish one where the presence of socially responsible investment is still marginal, information about the profile of investors is crucial.

As acknowledged by Spainsif (2012) two are the reasons for the scarce development of SRI in Spain: the limited supply of these financial products and the lack of knowledge on the part of the investors of these investment tools. As we have commented in the introduction, the majority of the SRI in Spain is conducted by the institutional investors. Nevertheless, as stated by Spainsif (2012), in the short term there is an important challenge for socially responsible asset managers: to attract retail investors overcoming the lack of confidence due to recent financial scandals and their traditional conservative profile. In this chapter we try to take a first step in this sense, examining the propensity of Spanish investors to invest in a Socially Responsible (SR) manner based on socio-demographic characteristics. The results will point up the relative size and characteristics of the segments most likely to be SR-Investors in two differently developed markets: the Australian and Spanish markets.

We will also try to contribute to the extant literature analyzing the influence of some new characteristics as the size of town or religion on SRI decisions. The proposed approach consists of a logistic regression which identifies important predictors of the dependent variable. This information can be of great value for marketing researchers, institutional investors and fund managers attempting to identify those investors more receptive to SRI products. The information can also be used by advertising researchers to develop effective advertising campaigns.

2.3 Research Design and Results

In order to profile SR-Investors, our research design has two main elements. We begin by implementing a broad-based survey aimed at collecting a representative sample across a wide variety of demographic characteristics of SR-Investors and non-SR investors. We then use these data in logistic regression analyses seeking to uncover the important dimensions of the SRI profile in a multivariate setting.

SR-Investors are a small but established and unique subset of the total investor universe. Although we compare the SR group with the non SR our main aim is to identify the characteristics and preferences of SR-Investors. Thus, the population of interest in our study is investors that already invest in SRI profiled funds or are willing to invest in them.

SRI mutual funds represent a small proportion of the total number of mutual funds and some mutual fund providers do not offer their customers any SRI funds

(Nilsson 2008). Hence, we could not randomly sample the general population since the number of SR-Investors is likely to be small compared with the general population of conventional investors, especially in the case of countries as Spain. To avoid this problem, we obtained our sample of investors via an online survey. Based on a literature review and discussions with experts in the field of SRI, a preliminary questionnaire was prepared. It was tested on market researchers and academic experts, incorporating comments/suggestions into the final questionnaire.

The questionnaire was self-designed by the authors with exception of questions relating to risk tolerance and the use of a financial advisor, for which we use the Ethical Investment Services Risk Profile questionnaire, kindly provided by Janice Carpenter, senior adviser.² It was designed to capture, for each respondent, their Social Environment and Governance concerns, their financial preferences including investment style, preferred investment characteristics and risk tolerance, and their demographic details. The questionnaire included 37 questions, grouped into three parts: (i) Socially Responsible Concerns, (ii) Financial Issues, including investment style, decision making style and risk tolerance and, (iii) Socio-demographic Information.

A logistic regression was done based on the obtained data (Pérez-Gladish et al. 2012). The issues covered in the questionnaire used in this paper are based on a review of the literature and discussion with industry representatives. Similarly, based on a literature review, we make predictions as to the relation between the fact of being a SR-Investor and the socio-demographic characteristics of the investors. These predictions are summarized in Table 2.2. We examine the four previously most studied demographic variables (age, gender, income level and educational level) found in the investment literature, and we include four more new variables: size of town of residence, marital status, number of dependent persons and religion. Table 2.2 displays the considered hypothesis in this study.

In order to control if a respondent is a SR-Investor or not we have introduced the following questions in the survey:

Q_1 . Do you currently invest in socially responsible mutual funds?

Q_2 . In case you answered no to the previous question, would you like any social, environmental or ethical issues to be taken into account when looking at your investments?

We are considering as SR-investors those answering “yes” to questions Q_1 or Q_2 .

²Janice Carpenter is a Senior Financial Advisor at Ethical Investment Services. Janice is recognised as a key proponent of ethical investment in Australia. She has held a position on the board of the Australian Bush Heritage Trust and was Joint founding President of the Ethical Investment Association.

Table 2.2 Description of predictions

	Hypothesis	Authors
H_1	SR-Investors tend to be younger than non SR-Investors	Woodward (2000), Nilsson (2008), and Junkus and Berry (2010)
H_2	SR-Investors tend to be female	Beal and Goyen (1998), Junkus and Berry (2010)
H_3	SR-Investors tend to have higher income levels than non SR-Investors	Woodward (2000), Beal and Goyen (1998), Junkus and Berry (2010)
H_4	SR-Investors tend to be better educated than non SR-Investors	Woodward (2000), Nilsson (2008), Junkus and Berry (2010), Haigh (2007)
H_5	SR-Investors tend to live in metropolitan areas	Beal and Goyen (1998), Williams (2007)
H_6	SR-Investors tend to be married or with a partner	Junkus and Berry (2010)
H_7	SR-Investors tend to have dependent people	Woodward (2000)
H_8	SR-Investors tend to be more religious persons than non SR-Investors	Peifer (2011)
H_9	SR-Investors tend to be more concerned by SEG issues than non SR-Investors	Rosen et al. (1991), Nilsson (2008), Woodward (2000), Anand and Cowton (1993), McLachlan and Gardner (2004)
H_{10}	The more socially responsible the investor is, the more likely they have a positive or inclusionary investment strategy	Haigh (2007)
H_{11}	SR-Investors tend to avoid some particular holdings in particular companies.	Anand and Cowton (1993)
H_{12}	SR-Investors tend to avoid some particular holdings in particular industries	Anand and Cowton (1993)
H_{13}	SR-Investors tend to avoid some particular holdings in particular countries	Anand and Cowton (1993)
H_{14}	SR-Investors are more likely to invest in domestic assets	SIF (2010)
H_{15}	SR-Investors tend to visit more financial advisors	Haigh (2007)
H_{16}	SR-Investors tend to be concerned about both, financial and non-financial characteristics of their investments.	McLachlan and Gardner (2004), Lewis and Mackenzie (2000), Nilsson (2008), Woodward (2000)
H_{17}	SR-Investors tend to be more conscious of capital growth vs. income characteristics	Woodward (2000)
H_{18}	SR-Investors tend to be more risk tolerant	Nilsson (2008), Williams (2007), Haigh (2007), Beal and Goyen (1998)

2.4 Case Studies for the Spanish and the Australian Investors

In this chapter we try to take a first step examining the propensity of Spanish investors to invest in a Socially Responsible (SR) manner based on socio-demographic characteristics. The results will show the relative size and character-

istics of the segments most likely to be SR-Investors in two differently developed markets: the Australian and Spanish markets.

2.4.1 *Spanish Investors*

The link for the online survey in Spain was displayed on the Spanish Morningstar website from November 2008 to July 2012. We obtained 230 usable questionnaire responses from SR-Investors and 67 usable questionnaire responses from non SR-Investors.³

2.4.1.1 Descriptive Statistics

The study was based on a survey of 214 individuals, who filled out an online questionnaire which they accessed through a banner on www.morningstar.es. The survey included items regarding investment habits, personal preferences and attitudes toward social, ethical and environmental issues. As for the investor's socio-demographic profile, we should point out that 82.2% were men; 70.9% were married or with a partner; 54.0% had no dependents; 84.1% had university education; 59.8% were between 25 and 50 years old and 31.3% between 51 and 65; 64.1% declared themselves Catholics; 89.2% had a higher than average⁴ net disposable income; and, in terms of residence, 28.0% lived in a periphery small city,⁵ 24.3% in a big size city⁶ (Madrid) and 24.3% in a central small city.⁷

A very low percentage of the sample (8.5%) declared to be a socially responsible investor (SRI), most of whom (85.7%) invested below 50% of their investment budget in socially responsible funds (SRF). The main reasons for not investing in SRF are lack of information regarding this kind of products (51.5%) and the belief that they provide lower financial returns (22.2%).

Nevertheless, as many as 3 out of 4 individuals stated that they would like social, ethical or environmental issues taken into account when looking at their investments and 23.0% of them would be willing to invest above 50% in SRF. Participants were asked to assign a value to these issues, ranging from 1 (not at all concerned) to

³We acknowledge that there could be a sample selection bias. Investors who are committed to SRI are more likely to respond. Given that the focus of our study is to profile this group, selection bias is not likely to present a major problem for us.

⁴18,941.00 € (source: <http://stats.oecd.org>).

⁵Less than 500,000 inhabitants and located more than an hour drive away from a big or medium-sized city.

⁶Above 2.5 million inhabitants.

⁷Less than 500,000 inhabitants and located less than an hour drive away from a big or medium-sized city.

5 (extremely concerned), and results show that the ones that matter the most to Spanish investors are chemicals of concern (4.32), bribery and corruption (4.30), water pollution (4.26), training and development (4.19), human rights (4.11) and access to medicines in developing countries (4.04). At the bottom of the list are gambling (2.27), women on corporate boards (2.38), trade unions (2.50) and tobacco marketing (2.58).

As for investment strategies, 50.0 % of respondents declared not having one, while 13.0 % say they have a strategy of exclusion and 14 % defined theirs as a strategy of inclusion, the rest having a combination of strategies. 24.2 % would exclude certain companies from their investment portfolio and a very similar percentage would exclude specific regions or countries (26.3 %), mainly those which have non-democratic governments. As many as 30.8 % would exclude specific economic sectors, mainly mining, although it must be pointed out that a large number of participants mentioned the military sector and the weapon industry under the “Others” option.

Out of the 87.7 % who would like to invest in domestic assets, 70.0 % would do so with less than 50 % of their investment budget and 25.0 % with 50–75 % of it. 39.3 % of participants compare potential investments in order to choose those which provide good value for their price, whilst 17.8 % have high expectations and actively seek the highest quality products and 11.2 % focus on companies with well-known reputation. When looking for an investment, the factors that are most important⁸ to Spanish investors are the fund manager’s reputation (4.36), exit (4.05) and initial fees (4.05). On the contrary, they are less concerned about fund size (3.20) and past performance (3.25).

Respondents who want their investment to provide long term capital growth account for 42.5 and 47.2 % look for a regular income in addition to that.

The questionnaire included a section in which participants had to position themselves regarding several statements, and results obtained indicate that 61.6 % would put their investment budget in cash to protect the value of their savings, 51.6 % would set security above higher returns and 57.3 % expect most of their investments to be in place for more than 3 years.

As few as 7.0 % claimed that investing in shares is not for them as a consequence of the risks involved and 72.9 % stated that they do not mind seeing their investment fall in value for a year or more, provided the long-term return is good, which is endorsed by those who say they would keep an investment which is part of a long term strategy (5 years plus) even if it lost 15 % or more of its value in a year (58.9 %).

The majority of respondents were individual investors (96.6 %) and only 3.4 % were institutional investors. More than half of the participants (57.5 %) described their understanding of investment markets as good and one third said it is reasonable. When asked about the usual way through which initial contact is made to make an investment, 58.2 % answered it is Internet and, 27.7 % visits to an investment

⁸They were asked to pick a value from a scale ranging from 1 (not important) to 5 (essential) and average values were calculated for all factors in order to establish the order of importance.

advisor. This difference increases when the question refers to the preferred way to conduct investment transactions once first contact has been made, since 82.5 % selected Internet, versus 12.7 % who chose visits to an investment advisor.

2.4.1.2 Statistical Results: Logistic Regression

In what follows we will present the results of a logistic regression which identifies important predictors of the dependent variable: “Socially Responsible Investment Behavior”. This variable is defined as a dummy variable to represent two groups:

$$SRI_i = \begin{cases} 1 & \text{if the respondent investor would like to invest more than 50 \%} \\ & \text{of his/her budget in SR funds} \\ 0 & \text{otherwise} \end{cases}$$

We consider three key groups of factors influencing SRI behaviour:

- A group of socio-demographic variables
- A group of financial variables
- A group of Social, Environmental and Governance (SEG) variables

A Group of Socio-demographic Variables

The survey questions related to socio-demographic considerations are described using dummy variables or ordered categorical variables as follows:

$$D_{Bcityi} = \begin{cases} 1 & \text{respondents who live in a big city} \\ 0 & \text{otherwise} \end{cases}$$

$$D_{Femi} = \begin{cases} 1 & \text{respondents who are female} \\ 0 & \text{otherwise} \end{cases}$$

$$D_{Mari} = \begin{cases} 1 & \text{respondents who are married} \\ 0 & \text{otherwise} \end{cases}$$

$$D_{Depi} = \begin{cases} 1 & \text{respondents who are dependents} \\ 0 & \text{otherwise} \end{cases}$$

$$D_{unii} = \begin{cases} 1 & \text{respondents who have studied at university} \\ 0 & \text{otherwise} \end{cases}$$

$$D_{REli} = \begin{cases} 1 & \text{respondents who are religious} \\ 0 & \text{otherwise} \end{cases}$$

$$AGE_i = \begin{cases} 0 & \text{under 25 years} \\ 1 & \text{25–50 years} \\ 2 & \text{51–65 years} \\ 3 & \text{over 65 years} \end{cases}$$

$$ING_i = \begin{cases} 0 & \text{below average} \\ 1 & \text{average} \\ 2 & \text{above average} \end{cases}$$

A Group of Social, Environmental and Governance (SEG) Variables

Social, environmental and governance concerns are disregarded from 37 items on the questionnaire. The extraction of principal components to reduce the number of variables results in four proxy variables. Eigenvalues for components 1, 2, 3 and 4 were 22.3, 1.84, 1.40 and 1.19 respectively. Selecting four components allows 72.30% of the variance to be explained. We denote these components as: SEE_{PC1} ; SEE_{PC2} ; SEE_{PC3} and SEE_{PC4} .

Five components were initially selected but we decided to consider only the two first components which represent 65.26% of the variance and can be easily interpreted. The incorporation of the other components does not provide a significant increment of the explanation of the variance.

All SEG concerns load positively onto the first component, explaining 60.27% of the variance. Reference to the various loadings suggests that this variable can be interpreted as an *environmental-ethical oriented* factor, with the highest loadings on nuclear power; environmental management, policy, reporting and performance; pollution and water pollution within the environmental dimension, and aboriginal land rights; equal opportunities, and intensive farming and meat sale within the ethical dimension.

The second component covers *social/health* issues, the most relevant SEG concerns for this component being: Contraception; Breast milk substitutes; Military issues; Gambling; Animal Testing; Abortion; Alcohol and Tobacco marketing.

A Group of Financial Variables

Incorporating investor preferences for return, risk and types of investment. In what follows we present the factors included into the financial considerations:

- (i) *Investment strategy/screening process*. A specific survey question asked whether respondents adopt an inclusionary (positive) or exclusionary (negative) investment style. Accordingly, two dummy variables are created.

An alternative way to consider an exclusionary/inclusionary style is to capture the extent to which the investor would screen in terms of company, region or sector. Therefore, three additional dummy variables are created, $DSCom_i$, $DSReg_i$ and $DSSec_i$:

$$\begin{aligned}
 D_{Inci} &= \begin{cases} 1 & \text{respondents who have an inclusionary investment style} \\ 0 & \text{otherwise} \end{cases} \\
 D_{Exci} &= \begin{cases} 1 & \text{respondents who have an exclusionary investment style} \\ 0 & \text{otherwise} \end{cases} \\
 D_{SCom_i} &= \begin{cases} 1 & \text{respondents who have an exclusionary investment style} \\ & \text{for companies} \\ 0 & \text{otherwise} \end{cases} \\
 D_{SReg_i} &= \begin{cases} 1 & \text{respondents who have an exclusionary investment style} \\ & \text{for regions} \\ 0 & \text{otherwise} \end{cases} \\
 D_{Sec_i} &= \begin{cases} 1 & \text{respondents who have an exclusionary investment style} \\ & \text{for sectors} \\ 0 & \text{otherwise} \end{cases}
 \end{aligned}$$

- (ii) *Decision-making style*: To capture the respondents' decision-making style, a dummy variable is created to reflect if the investor has difficulties when making choices and seeks help or not:

$$D_{Help_i} = \begin{cases} 1 & \text{investors seek help when making choices} \\ 0 & \text{otherwise} \end{cases}$$

- (iii) *Investment characteristics*: An ordered categorical variable (DOM) is created to reflect the percentage of the investment budget investors would include in domestic assets:

$$DOM_i = \begin{cases} 0 & \text{those that invest 0–25 \% of their budget in domestic assets} \\ 1 & \text{those that invest 25–50 \% of their budget in domestic assets} \\ 2 & \text{those that invest 50–75 \% of their budget in domestic assets} \\ 3 & \text{those that invest 75–100 \% of their budget in domestic assets} \end{cases}$$

Nine alternative characteristics of funds (relating to performance, reputation, fees, age and size) were presented to respondents for them to identify which are important to them when looking for an investment. A PCA is performed on the nine items. The first component has an eigenvalue of 4.3 and explains 43.47 % of the variance. The second and third components have eigenvalues of 1.6 and 1.4, respectively, and all three together explain 74.23 % of the variance.

Accordingly, three variables are created: $InvC_{PC1}$, $InvC_{PC2}$ and $InvC_{PC3}$. The first component is essentially a general fund variable with a focus on fees and reputation. The second component is a performance variable, while the third represents age and size of the fund.

Two dummy variables are created to reflect desired growth/income characteristics of the investment:

$$D_{LTGi} = \begin{cases} 1 & \text{respondent wants investments to provide long-term capital growth} \\ 0 & \text{otherwise} \end{cases}$$

$$D_{Gli} = \begin{cases} 1 & \text{investor wants his investments to provide both growth/income} \\ 0 & \text{otherwise} \end{cases}$$

- (iv) *Risk profile*: A risk tolerance variable ($RTol$) is created using PCA on the three survey questions that address the investor's preferences to invest in cash, risk versus higher returns, and views on the riskiness of share investments. The responses to the three questions are reduced to one variable, given by the first principal component (the eigenvalue on the first component was 1.4 and explains 46.52 % of the variance).

Respondents were asked to self-assess their understanding of investment markets. Based on the responses, an ordered categorical variable $UNDIM$ is created (0, 1, 2, 3, 4), increasing in their level of understanding (where 0 = no understanding through to 4 = excellent understanding). This variable is used as a control in assessing the relevance of risk tolerance levels to investment decisions.

- (v) *Investment horizon*: An ordered categorical variable HOR taking values from 0 to 4, representing the investment horizon, where 0 = less than 2 years; 1 = 2–3 years; 2 = 3–5 years; 3 = 5–7 years and 4 = >7 years. The investor's long-term investment focus L_{TERM1} is captured using an ordered categorical variable (0–4) where 0 (4) represents those investors strongly agreeing (strongly disagreeing) that they would not mind a short-term loss providing the long-term return is good. Similarly, those willing to keep an investment as part of a long-term strategy, even if there was a short-term loss (15 % or more in a year) allows the creation of an additional ordered categorical variable (0–4) L_{TERM2} .

Table 2.3 summarizes the results obtained for different *logit* analysis with the aim of evaluating the influence of the different variables on the Spanish socially responsible investor profiles. All the models include demographic variables as control variables. Independent variables are displayed in the first column and the obtained coefficients are shown in the second column with the corresponding p-value within parentheses as well as the odds ratio for those cases in which they are significant.

Table 2.3 Regression results for Spanish investors

Regression 1: Demographics		Regression 2: SEG concerns		Regression 3: Investment style (a)		Regression 4: Investment style (b)		Regression 5: Growth-/income		Regression 6: Risk tolerance	
Ind V	Est.Coe.	Ind V	Est.Coe.	Ind V	Est.Coe.	Ind V	Est.Coe.	Ind V	Est.Coe.	Ind V	Est.Coe.
β	-1.081 (0.186)	β	-1.436 (0.154)	β	-1.108 (0.178)	β	-1.172 (0.180)	β	-0.803 (0.412)	β	-1.432 (0.222)
INC	-0.476 (0.108)	INC	-0.302 (0.409)	INC	-0.470 (0.114)	INC	-0.395 (0.193)	INC	-0.539 (0.087)	INC	-0.340 (0.271)
AGE	0.728 (0.005) (2.071)	AGE	0.779 (0.016) (2.180)	AGE	0.733 (0.004) (2.082)	AGE	0.858 (0.002) (2.359)	AGE	0.664 (0.020) (1.942)	AGE	0.824 (0.003) (2.280)
D_{BCity}	0.033 (0.934)	D_{BCity}	0.001 (0.998)	D_{BCity}	0.022 (0.956)	D_{BCity}	-0.086 (0.837)	D_{BCity}	0.121 (0.776)	D_{BCity}	0.221 (0.606)
D_{Uni}	-0.577 (0.186)	D_{Uni}	-0.390 (0.486)	D_{Uni}	-0.579 (0.187)	D_{Uni}	-0.479 (0.291)	D_{Uni}	-0.377 (0.421)	D_{Uni}	-0.411 (0.372)
D_{Dep}	-0.073 (0.833)	D_{Dep}	-0.275 (0.526)	D_{Dep}	-0.071 (0.838)	D_{Dep}	-0.066 (0.853)	D_{Dep}	0.125 (0.728) (2.071)	D_{Dep}	-0.043 (0.958)
D_{Rel}	-0.585 (0.089) (0.557)	D_{Rel}	-0.748 (0.096) (0.473)	D_{Rel}	-0.592 (0.086) (0.553)	D_{Rel}	-0.510 (0.154)	D_{Rel}	-0.749 (0.042) (0.473)	D_{Rel}	-0.521 (0.149)
D_{Fem}	0.978 (0.024) (2.658)	D_{Fem}	1.127 (0.031) (3.086)	D_{Fem}	0.983 (0.024) (2.671)	D_{Fem}	1.031 (0.022) (2.804)	D_{Fem}	0.960 (0.033) (2.613)	D_{Fem}	0.841 (0.085) (2.319)

(continued)

Table 2.3 (continued)

Regression 1: Demographics		Regression 2: SEG concerns		Regression 3: Investment style (a)		Regression 4: Investment style (b)		Regression 5: Growth-/income		Regression 6: Risk tolerance	
D_{Mar}	0.342 (0.392)	D_{Mar}	0.035 (0.942)	D_{Mar}	0.335 (0.403)	D_{Mar}	0.448 (0.282)	D_{Mar}	0.497 (0.240)	D_{Mar}	0.324 (0.433)
		SEE_{PC1}	0.550 (0.029) (1.734)	D_{Exc}	0.019 (0.975)	D_{SCom}	0.440 (0.345)	D_{Help}	0.936 (0.072) (2.551)	RTol	-0.276 (0.211)
		SEE_{PC2}	0.699 (0.002) (2.012)	D_{Inc}	0.181 (0.739)	D_{SReg}	-0.672 (0.155)	D_{LTG}	-0.805 (0.447)	U_{NDIM}	0.169 (0.460)
						D_{SSec}	-0.672 (0.155)	D_{GI}	-0.418 (0.500)	HOR	-0.431 (0.017) (0.650)
						DOM	-0.343 (0.111)	$InvC_{PC1}$	0.010 (0.959)	LT_{erm1}	0.145 (0.488)
								$InvC_{PC2}$	0.384 (0.041) (1.468)	LT_{erm2}	-0.081 (0.694)
								$InvC_{PC3}$	0.030 (0.871)		
R^2 p-val	0.13 19.137 0.014	R^2 p-val	0.227 25.678 0.004	R^2 p-val	0.131 19.246 0.037	R^2 p-val	0.178 25.822 0.011	R^2 p-val	0.167 24.263 0.043	R^2 p-val	0.221 33.491 0.001

This table presents the results from the logistic analysis. The dependent variable is SRI, an dummy variable where $SRI_i = 1$ for those that invest more than 50 % of their budget in socially responsible funds and $SRI_i = 0$ otherwise. The independent variables are specified in the first column of each pair of columns. The coefficients are reported with the p-value in parentheses

The first regression (**Regression 1**) includes only the demographic variables. We can observe that only three variables: age, sex and religion are significant at levels 1, 5 and 10 % respectively. If we observe the coefficients, only for the variable sex the sign is the predicted. This confirms that being a woman is positively related to being socially responsible. Analysing the odds ratio, women have triple possibilities of being socially responsible compared with men (2.658). Religion has an estimated negative coefficient which means that religious investors are less likely to invest in socially responsible mutual funds. The possibility of being socially responsible is reduced by 0.557 in the case of religious investors. The positive coefficient of the variable age suggests that older investors are more likely to be socially responsible than young investors (twice as much). The set of demographic variables is considered as a set of control variables for the remaining regressions.

In the second regression model (**Regression 2**) the demographic variables are combined with variables SEE_{PC1} , SEE_{PC2} obtained from the Principal Component Analysis which summarizes the 37 questions related to SEG concerns. The obtained results show how age, sex and religion maintain their relevance and that SEG_{PC1} and SEG_{PC2} are significant variables at level 5 %. In both cases, the positive expected relation is obtained. These two components reflect environmental-ethical and social-health related investors' concerns.

Regression 3 combines the demographic variables with the investment style, that is, it takes into account if the investor follows an inclusive or exclusive investment strategy. In this case we see how the demographic variable age, sex and religion retain their significance. However, we found that the style (inclusive or exclusive investment) is not significant and, therefore, is not associated with being socially responsible or not.

In **Regression 4**, we differentiate between exclusionary strategies that discriminate by country, region or sector and we include a variable reflecting the level of domestic investments. Again, the obtained results confirm that socially responsible investors in this sample do not follow an exclusionary strategy of any kind and are not interested in investing in domestic assets.

In **Regression 5**, variables are included in the specification to analyse socially responsible behaviour in relation to whether or not respondents need advice in their investment decision making process; the expected outcome of the long-term growth investments or a combination growth and regular income; and the three principal components extracted from the investment characteristics (InvCPC1; InvCPC2; InvCPC3). This regression analysis shows that demographic variables age, sex and religion remain relevant together with this group the variable income significant at 10 % and with a negative influence, indicating that higher-income investors are inclined to a lesser extent for socially responsible investing. The advice when making an investment is a significant variable at 10 % having a positive impact. Investors seeking advice are 2.551 times more likely to invest in socially responsible funds than investors who do not seek financial advice when investing. The second component related to financial performance has a positive influence on socially responsible investing. Investors who pay special attention

to the financial results have a propensity 1.468 times higher to invest in socially responsible funds than investors who do not pay attention to those results.

Finally, **Regression 6** incorporates demographic variables, risk tolerance (*RTOL*), knowledge of financial markets, the investment horizon and variable, *LTERM2* and *LTERM1*, related to the performance of long-term investments. The results show that the investment horizon is a significant variable at 5 % with a negative coefficient, which indicates that in our case, the socially responsible investors have a focus on short-term investments.

2.4.2 Australian Investors

We obtained our sample of investors via an online survey available for Australian investors from the RIAA.⁹ Based on a literature review and discussions with experts in the field of SRI, a preliminary questionnaire was prepared. It was tested on market researchers and academic experts, incorporating comments/suggestions into the final questionnaire which consists of 37 questions, a mixture of open-ended and Likert-scaled questions.¹⁰ The link for the online survey was displayed on the RIAA website and also published in their newsletter. There are 145 usable questionnaire responses from current SR investors.¹¹

2.4.2.1 Descriptive Statistics

About one third of our sample adopt an exclusionary approach (negative criteria) to their investment strategy, 6 % inclusionary (positive criteria) and 45 % a combination of strategies. The majority of our sample are in the two extremes, 35 % invest between 0–25 and 35 % invest between 75 and 100 % of their budget. The majority of investors (61 %) indicate that they would like to exclude some specific companies from their portfolio. Only about a quarter of the sample would exclude regions (mostly communist or dictatorial regimes). Many noted a preference to support Australian companies. Fifty-three percent of respondents would exclude specific sectors, with mining being the most noted industry for exclusion. When looking for a fund the most important criteria is management reputation, closely followed by

⁹The RIAA is an industry body for professionals working in responsible investment in Australia and New Zealand. RIAA helps individuals and organizations learn more about how they can make investment choices and take environmental, social, ethical or governance issues into account, in addition to the more conventional focus on financial objectives.

¹⁰A copy of the survey questions is available from the authors upon request.

¹¹We acknowledge that there could be a sample selection bias. Investors who are committed to SRI are more likely to respond. Given that the focus of our study is to profile this group, selection bias is not likely to present a major problem for us.

current performance, exit fees and past performance. Annual fees and initial fees also rank, on average, as quite important. About half of the respondents look for capital growth, whereas 39 % seek a combination of growth and regular income. A slight majority seek support of a financial adviser, even though two thirds believe that they have at least a reasonable understanding of investment markets. Safety is a concern with 37 % indicating that safety is more important than higher returns. However, 35 % seek higher returns with 26 % being neutral to the trade-off between safety and returns.

The majority of participants, 66 % (81 %) have an investment horizon less than 7 (5) years. This long-term perspective is supported in answering other related questions, where 85 % indicate that they will accept a fall in their investment if long term return is good. The majority of respondents can be classified as prudent (73 %), that is, they seek a balanced portfolio to achieve their medium to long-term financial goals, while just 16 % are classified as “aggressive”.

The participants also identified their level of social, ethical and/or environmental concerns. On the basis of the mean score from a rating scale of 0–4, the top ten issues of concern are: Water pollution (3.59), Climate change and greenhouse gases (3.57), Pollution (3.51), Nuclear power (3.37), Human rights (3.33), Biodiversity (3.26), Environmental management policy reporting and performance (3.25), Chemicals (3.21), Sustainable timber (3.19) and finally, Military issues (3.14). The least important issues are abortion and trade unions.

The majority of our sample of SR-Investors are young/middle aged. There are more female (74 %) than male (26 %) SR-Investor respondents. Seventy-two percent of our sample has no dependent persons, though 68 % are married/defacto. The participants are well educated with 84 % having a Bachelor degree or higher. Forty-two percent of the respondents are on a higher than average income.¹² The majority of our sample (67 %) are not religious and a slight majority (56 %) live in a big city (defined as more than 2.5 million inhabitants). Investors prefer visits to an investment advisor for initial contact when deciding to invest (41 %), but they prefer the Internet (37 %) in order to follow transactions once the initial contact has been established.

2.4.2.2 Dependent Variable

Unlike the case of Spain, the largest proportion of respondents in Australia are classified as SR-Investors. This allows us to test the predictions outlined in Table 2.2 by following several authors from the economic psychology literature, and use the proportion invested in a socially responsible way as a proxy for “moral commitment” (Lewis and Mackenzie 2000). Nilsson (2008) defines socially responsible investment behaviour as “how much the consumer invests in SRI” and

¹²Annual Average income \$42,983. Source: <http://stats.oecd.org>

presents a model of expected influential variables on socially responsible investment behaviour.

The dependent variable is then defined in terms of categories for the percentage of the budget used to invest in socially responsible mutual funds representing “Socially Responsible Investment Behaviour”. Specifically, an ordered categorical variable (0, 1, 2) is created to represent three groups:

$$DOM_i = \begin{cases} 0 & \text{those that invest 0–25 \% of their budget in SR funds} \\ 1 & \text{those that invest 25–75 \% of their budget in SR funds} \\ 2 & \text{those that invest 75–100 \% of their budget in SR funds} \end{cases}$$

SRI is the dependent variable in ordered probit models designed to test the predictions outlined in Table 2.4. We consider the same three key groups of factors influencing *SRI* behaviour presented in the case of Spanish Investors: (1) a group of SEG variables, (2) a group of financial variables incorporating investor preferences for return, risk and types of investment, and (3) a number of socio-demographic variables.

As in the case of Spanish investors, SEG concerns are captured using 37 items on the questionnaire. To reduce the dimensionality of these potential proxies, a principal component analysis (PCA) is again conducted on the responses to these items. Eigenvalues for components 1, 2, 3, 4 and 5 were 11.03, 3.55, 2.35, 1.98 and 1.73, respectively, while the first nine components have eigenvalues > 1. For reasons of parsimony we adopt a higher cut-off – selecting four components allows 50 % of the variance to be explained. We denote these as:

The majority of the SEG concerns load positively (and reasonably uniformly) onto the first component, explaining 29 % of the variance. Reference to the various loadings suggests that this variable can be interpreted as a *social conscious* factor with the highest loading on community, equal opportunity, human rights, breast milk substitutes and bribery. We label the second component as an *environmental* variable with higher loadings on issues including mining, nuclear power, pollution, sustainable timber, water pollution and intensive farming. Fur and animal testing also load onto this component. The third component covers *social/health* issues, reflected by the fact that the most relevant SEG concerns for this component are: abortion, alcohol, breast milk substitutes, intensive farming and meat sale, fur and tobacco marketing. The fourth component is deemed to reflect a *social/environmental* component with the highest loadings from gambling, greenhouse gases, nuclear power and tobacco. These results are somewhat similar to those obtained by Rosen et al. (1991) – they identify the two categories most frequently mentioned by investors as issues of concern: environment and labour relations. The rest of variables are the same as in the Spanish case study.

Table 2.4 Regression results

Regression 1: Demographics		Regression 2: SEG concerns		Regression 3: Investment style (a)		Regression 4: Investment style (b)		Regression 5: Growth–growth/income		Regression 6: Risk tolerance	
<i>Ind V</i>	Est. Coeff (p–value)	<i>Ind V</i>	Est. Coeff (p–value)	<i>Ind V</i>	Est. Coeff (p–value)	<i>Ind V</i>	Est. Coeff (p–value)	<i>Ind V</i>	Est. Coeff (p–value)	<i>Ind V</i>	Est. Coeff (p–value)
<i>INC</i>	0.11 (0.92)	<i>INC</i>	0.10 (0.45)	<i>INC</i>	0.6 (0.59)	<i>INC</i>	0.06 (0.62)	<i>INC</i>	0.00 (0.98)	<i>INC</i>	−0.02 (0.88)
<i>AGE</i>	0.22 (0.16)	<i>AGE</i>	0.14 (0.40)	<i>AGE</i>	0.19 (0.23)	<i>AGE</i>	0.14 (0.43)	<i>AGE</i>	0.22 (0.18)	<i>AGE</i>	0.14 (0.39)
<i>D_{BCity}</i>	−0.13 (0.51)	<i>D_{BCity}</i>	0.04 (0.86)	<i>D_{BCity}</i>	−0.22 (0.29)	<i>D_{BCity}</i>	−0.16 (0.47)	<i>D_{BCity}</i>	−0.08 (0.72)	<i>D_{BCity}</i>	−0.10 (0.66)
<i>D_{Uni}</i>	0.47 (0.09)	<i>D_{Uni}</i>	0.51 (0.10)	<i>D_{Uni}</i>	0.47 (0.09)	<i>D_{Uni}</i>	0.60 (0.04)	<i>D_{Uni}</i>	0.47 (0.10)	<i>D_{Uni}</i>	0.43 (0.12)
<i>D_{Dep}</i>	−0.17 (0.47)	<i>D_{Dep}</i>	−0.09 (0.72)	<i>D_{Dep}</i>	−0.1 (0.68)	<i>D_{Dep}</i>	−0.15 (0.56)	<i>D_{Dep}</i>	−0.31 (0.21)	<i>D_{Dep}</i>	−0.13 (0.61)
<i>D_{Rel}</i>	−0.29 (0.13)	<i>D_{Rel}</i>	−0.53 (0.01)	<i>D_{Rel}</i>	−0.32 (0.13)	<i>D_{Rel}</i>	−0.28 (0.16)	<i>D_{Rel}</i>	−0.25 (0.23)	<i>D_{Rel}</i>	−0.36 (0.07)
<i>D_{Fem}</i>	0.5 (0.01)	<i>D_{Fem}</i>	0.36 (0.12)	<i>D_{Fem}</i>	0.46 (0.04)	<i>D_{Fem}</i>	0.62 (0.00)	<i>D_{Fem}</i>	0.31 (0.22)	<i>D_{Fem}</i>	0.46 (0.06)

(continued)

Table 2.4 (continued)

Regression 1: Demographics	Regression 2: SEG concerns	Regression 3: Investment style (a)	Regression 4: Investment style (b)	Regression 5: Growth–growth/income	Regression 6: Risk tolerance
D_{Mar}	D_{Mar}	D_{Mar}	S_{Mar}	D_{Mar}	D_{Mar}
0.26 (0.22)	0.11 (0.65)	0.3 (0.19)	0.36 (0.11)	0.23 (0.31)	0.21 (0.37)
	SEE_{PC1}	D_{Exl}	D_{SCom}	D_{Help}	$RTol$
	0.07 (0.02)	0.18 (0.42)	0.23 (0.31)	0.20 (0.38)	−0.08 (0.39)
	SEE_{PC2}	D_{Inc}	D_{SReg}	D_{LTG}	$UNDIM$
	0.05 (0.33)	0.51 (0.21)	0.40 (0.10)	−0.33 (0.31)	−0.05 (0.68)
	SEE_{PC3}		D_{SSec}	D_{GI}	HOR
	0.16 (0.01)		0.01 (0.97)	−0.10 (0.76)	0.11 (0.42)
	SEE_{PC4}		D_{SMin}	$ImvC_{PC1}$	$LTerm1$
	0.11 (0.15)		0.01 (0.97)	−0.10 (0.05)	−0.09 (0.66)
			DOM	$ImvC_{PC2}$	$LTerm2$
			0.16 (0.16)	0.01 (0.92)	−0.24 (0.21)
				$ImvC_{PC3}$	
				0.20 (0.03)	
R^2	0.04	R^2	R^2	R^2	R^2
		0.04	0.07	0.04	0.06

This table presents the results from the ordered probit analysis. The dependent variable is SRI, an ordered categorical variable where $SRI_i = 0$ for those that invest 0–25 % of their budget in socially responsible funds; $SRI_i = 1$ for those that invest 25–75 % of their budget in socially responsible funds and; $SRI_i = 2$ for those that invest 75–100 % of their budget in socially responsible funds. The independent variables are specified in the first column of each pair of columns. The coefficients are reported with the p-value in parentheses

2.4.2.3 Ordered Probit Regression Results

A series of ordered probit models are estimated to assess if the level of investment in SR funds can be explained by different SEG concerns, investment strategies, decision making style, risk tolerance and demographics. Demographic variables are included in all models as a set of controls. The results are presented in Table 2.4. The quadratic hill climbing approach is adopted and Huber/White robust covariance is used.¹³ The dependent variable is *SRI*, an ordered categorical variable defined earlier. We adopt a “grouping” strategy in our estimations – that is, we consider in discrete groups, independent variables around the themes discussed earlier. The independent variables are specified in the first column of each pair of columns. The coefficients are reported with the *p* – value in parentheses.

Regression 1 provides the baseline results in which only the demographic variables are included. In this first case, only two variables produce significant coefficient estimates: the university (10 % level) and female (1 % level) dummy variables. In both instances the predicted positive relation is observed – both women and university educated respondents tend to have a higher portion of their investment budget devoted to socially responsible funds. In contrast, our sample does not support any relation between income, age, urban domicile, having dependents, religious beliefs or being married and the level of SR fund investment. These results are consistent with the literature summary presented in Sect. 2.3 with the exception that we do not find a significant age relation. The full set of demographic variables is retained as a set of controls in all remaining regressions.

The variables constructed from the PCA of the SEG concerns are combined with the demographic variables in Regression model 2. These results show that the first and third components are both significant (at the 5 % level). As discussed above, these components reflect the social conscience and social health issues of investors. Interestingly, components 2 and 4 tend to reflect environmental issues and are not significant. It seems that investors with an environmental focus are not seeking to invest a higher proportion in SR funds. The social concerns and health issues focus on community, equal opportunity, human rights, breast milk substitutes, bribery, abortion, alcohol, intensive farming and meat sale and fur/tobacco marketing. Australian SRI investors are less focused on environmental issues. Prior studies that focus on investor preferences show environmental issues are more relevant (see, for example, Nilsson 2008).

It is noted in **Regression 2** that religion has a negative and significant estimated coefficient, suggesting that investors who are religious are less likely to invest in SR funds. This finding is counter intuitive. One explanation may be the heterogeneity in the religious group. Brammer et al. (2006) explore the rela-

¹³Regression diagnostics on all specifications indicate rejection of normality. Given this situation, the choice of Huber/White covariance provides robust estimates with respect to general misspecification of the conditional distribution of the dependent variable.

tionship between religious denomination and individual attitudes to corporate social responsibility (CSR) within the context of a large sample of respondents drawn from 20 countries. Evidence found by the authors suggests that, broadly, religious individuals do not prioritise the responsibilities of the firm differently but do tend to hold broader perceptions of the social responsibilities of business than non-religious individuals. However, they find that this is true neither for all religious groups, nor for all areas of CSR. Instead of observing a clear difference between religious and non-religious individuals, the authors find a notable degree of heterogeneity within the group of religious individuals.

Regression 3 augments the demographic considerations with the broad investment style considerations – namely, whether the investor takes on an inclusionary or exclusionary strategy to their investment. First, we see that the same two demographics (university education and being female) retain their significance. However, we see that having either an inclusionary or an exclusionary style is not related to the level of SRI investment. This finding does not support our prediction. It is perhaps indicative of an evolving environment for the SR-Investors.

Traditionally, an exclusionary approach has been adopted in the formation of SR portfolios (Knoll 2002). Yet our raw questionnaire results, show that while investors are keen to exclude particular industries or countries, they are also conscious of adopting an inclusionary strategy focusing on domestic investment – akin to the well-documented “home bias” phenomenon. Furthermore, 45 % of our sample investors adopted a combination of strategies.

Regression 4. This specification incorporates more specific investment style considerations: namely, screening on country, screening on region, screening on sector, screening on mining and the level of investment devoted to domestic companies. The results show that respondents who screen on the basis of region are more likely to invest a higher proportion in SR funds (10 % level). The other possible forms of screening seem unimportant. The SR-Investors in this sample do not adopt general inclusionary/exclusionary processes. However, they are conscious of regional screens.

Regression 5 augments the demographic variable set with: the “help” dummy, growth and growth/income dummies, and the three principal components extracted from the investment characteristics variables ($InvC_{PC1}$, $InvC_{PC2}$, $InvC_{PC3}$). Of these variables, the first and third investment characteristics components are statistically significant. Specifically, the first component represents “*fund fees*” and has a negative impact on the level of investment in SR funds and a positive impact in fund financial performance. These findings are consistent with the broader literature (Rosen et al. 1991; Woodward 2000; Lewis and Mackenzie 2000; Nilsson 2008) and indicate that SR-Investors are seeking financial return as well as the non-financial benefit.

Finally, we have **Regression 6** which augments the demographic variables with risk tolerance ($RTol$), while additionally controlling for understanding of markets ($UNDIM$) and whether the investor has a long-term investment focus ($LTERM1$ and $LTERM2$). Our sample fails to show significant results with regard to risk

tolerance, contrary to the findings of Rosen et al. (1991) who show that SR-Investors are “somewhat risk averse”. This result is consistent with a lesser focus on the risk-return relation. SR-Investors are performance and fee conscious but are not focusing on the tradeoff with risk.

Conclusions

In this chapter we have tried to shed light on the profile of the socially responsible investors. The profile of socially responsible investors has been widely studied with heterogeneous results depending on the country, the sample and the period of time of the study. In this chapter we present the results of a survey for Australian and Spanish SR investors. Both financial markets are very different with regard to the degree of popularity and penetration of socially responsible investments. Our goal is to understand preferences in SRI fund investing. The online survey covers socio-demographic characteristics, SEG characteristics, preferences in investment styles and financial characteristics including risk and return attitudes.

In our core analysis, in the case of Australia, we estimate a series of ordered probit models where the dependent variable is a categorical variable based on ranges in the percentage of their budget used to invest in socially responsible mutual funds.

To assess the SEG characteristics we ask participants to identify issues, relevant to them, from a list of 27 social, environmental and ethical concerns. Using a PCA we find four relevant categories: social conscious, including community related issues; environmental, including mining and nuclear power; social/health issues, including abortion and alcohol and; social/environmental component, including gambling and greenhouse gases. However, in our probit analysis we find Australian investors are more focused on social and social/health issues as opposed to environmental issues.

The importance of fund characteristics is assessed across a number of questions. Our PCA analysis shows that investors focus on fees, age and size of the fund and, performance. In the probit analysis, fees and performance are important to investors. In terms of the investors style there is representation from both exclusionary and inclusionary investors and some do prefer to exclude specific companies, regions or industries. However, the only significant style coefficient is the exclusion of some regions. We conclude that Australian SR investors seek to satisfy both performance and social objectives, yet the group is heterogeneous with respect to their individual investment style.

We also develop a risk tolerance variable from questionnaire responses but find this variable is not significant in SR investment. Indeed, the descriptive

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analysis of the questionnaire responses shows that the sample comprises a wide cross section of investors from very risk averse to less risk averse.

The results for Australia show that Australian SR fund investors are a heterogeneous group with varying risk preferences. They are both fee and performance conscious as well as socially responsible. Indeed, they focus on social conscious and social health issues as opposed to environmental concerns. Our study complements the vast literature using performance based analysis where researchers question the relative performance of SRI with conventional investment alternatives. While the results from these studies are mixed, many show that SRI investors are not necessarily financially penalized (see for e.g.: Statman 2000; Asmundson and Foerster 2001; Cummings 2000). Our results show that SR-Investors are indeed fee and performance conscious. We conclude that Australian SR-Investors, although they have a social conscience, are financially aware.

In the case of Spain, we find SR Spanish investors likely to be female (Beal and Goyen 1998) and, contrary to our initial predictions we find that the propensity for being socially responsible is not greater for religious investors. We also find that the older the investor the more likely to be socially responsible. This result is similar to that obtained by Beal and Goyen (1998) and Pérez-Gladish et al. (2012) for Australian investors. Surprisingly, our study reveals that Spanish SR investors tend to be lower income investors. From the reviewed studies in the literature, only Rosen et al. (1991) found the same result.

To assess the SEG characteristics we ask participants to identify issues, relevant to them, from a list of 37 social, environmental and ethical concerns. Using a PCA we find two relevant categories: environmental/ethical issues and social/health issues.

As in the case of Australia, the importance of fund characteristics is assessed across a number of questions. Our PCA on financial issues shows that investors focus mainly on fees and financial performance. In terms of the investors' style Spanish socially responsible investors do not demonstrate an exclusionary investment policy contrary to Australian investors, where there is representation from both exclusionary and inclusionary investors and some do prefer to exclude specific companies, regions or industries. Nevertheless, we conclude that Spanish SR investors like Australian SR investors seek to satisfy, performance and social objectives, yet the group is heterogeneous with respect to their individual investment style.

We also use a risk tolerance variable from questionnaire responses but we find, as happened with Australian investors, that this variable is not significant in SR investment. Indeed, as in the case of Australian investors, the descriptive analysis of the questionnaire responses shows that the sample comprises a wide cross-section of investors, from very risk averse to less risk averse.

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The obtained heterogeneous profile for Spanish investors could be explained by the scarce degree of penetration of socially responsible investment products in the Spanish market. Spanish investors are very conservative, favoring fixed income and/or traditional bank deposits over equities (EUROSIF 2012). Most of the Spanish individual investors show a lack of interest and awareness about this kind of financial products. Nevertheless, the SRI market is starting to gain popularity in Spain especially after the financial crisis. The SRI market in Spain is still dominated by a few large institutional investors, in particular large occupational pension funds. In this context, any attempt to profile SR investors could be a useful tool for promoting the success of these investment products in the market. This study confirms the results obtained by other authors about the heterogeneity of SR investors especially in those markets where SRI is less developed.

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