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Can socially responsible investment for cleaner production improve the financial performance of Spanish pension plans?☆

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ABSTRACT

Assets under management involved in socially responsible investing almost trebled from 2007 to 2011 in Europe, led by pension funds. Such growth has encouraged the implementation of socially responsible activities by companies, which have improved their cleaner production methods in order to reduce greenhouse gas emissions, total water used, energy consumption and waste generated, among others. Integrating environmental, social and governance policies for cleaner production into the investment strategy of pension plans could increase their cost deriving from the screening process and/or increase the benefits, because socially responsible companies in which pension funds invest might achieve a better financial performance than traditional companies, which could in turn affect pension plans' financial performance. For this reason, the aim of this paper is two-fold: firstly, to examine the financial performance of Spanish pension plans compared to market benchmarks taking into account the category to which they belong, and the socially responsible business strategy implemented by the manager; and secondly, to analyze whether differences in financial performance exist between solidarity pension plans, ethical pension plans and traditional pension plans. To do this, we have a sample of 651 individual system pension plans. Using these sample data, we implement the robust random effects panel data methodology. The results show that ethical pension plans, which invest in companies that improve their cleaner production methods, achieve a similar financial performance to conventional pension plans, while solidarity pension plans significantly outperform conventional pension plans.

1. Introduction

In recent years, individual investors, media, non-governmental organizations (NGOs) and governments have focused on the impact of financial institutions' investment on the environment and society (Eurosif, 2012; Goy and Schwarzer, 2013; OECD, 2007). This has encouraged pension and mutual fund managers to adopt social responsibility management strategies based on (1) donating part of the revenues to charity and/or doing community work (responsive social responsibility strategy), which improves their reputation and therefore the financial performance, as found by Smith and Higgins (2000), Brammer and Millington (2008) and Margolis et al. (2007), and/or (2) integrating social and environmental initiatives into their core management strategy (strategic social responsibility strategy) which enables them to create a competitive advantage while satisfying the demands of their stakeholders, thereby also improving their financial performance, as shown by Callan and Thomas (2009).

The latter investment strategy, implemented by ethical pension plans, consists of adopting negative screening methods and/or positive screening methods, with managers able to combine both screening methods, as mentioned by Goy and Schwarzer (2013) and O'Rourke (2003).

The negative screening methods consist of excluding stocks of companies that belong to a sector characterized by unsatisfactory behaviors or whose practices are not aligned with specific norms, such as the United Nations Principles for Responsible Investment (UN-PRI). These principles, launched by UNEP Finance Initiative and the UN Global Compact, provide a unifying framework that is internationally recognized and accepted by 1249 signatories around the world – whose assets under management reached USD 34 trillion at the end of April 2013 (UN-PRI Global Compact, 2013) – including financial entities that manage ethical pension plans in Spain. The adoption of these principles requires that signatories ask companies in which they invest to adopt and support a set of core values in the areas of human rights, labor standards, the

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environment and anti-corruption, and promoting more efficient use of human and natural resources, which improves their operating results (UN-PRI Global Compact, 2013).

On the other hand, positive screening methods consist of selecting, within a given investment universe, stocks of companies that perform best against a set of social, environmental and governance criteria. Among positive screening methods, the most popular is the "Best in Class" (Goy and Schwarzer, 2013), which involves ranking companies according to environmental, social and governance factors relative to industry peers and selecting the firms that score highly on these factors, both individually and as a whole (Brown and Stone, 2007; Goy and Schwarzer, 2013; O'Rourke, 2003). Therefore, managers, as well as taking into account social and governance issues, assess and reward firms that (1) integrate environmental issues in their strategy taking into account the role of the executive in environmental work, environmental policy and environmental programs implemented (such as eco-efficiency programs minimizing unwanted social and environmental consequences), among others; (2) develop sustainability-advantage products that can be recycled; (3) use production systems that reduce water used, toxic emissions and energy consumption, adopting renewable energy; (4) have environmental certifications (for example ISO 14001), using environmental audits and (5) report on the environmental impact of their business activities, by using eco-labels, etc. (O'Rourke, 2003; Said et al., 2013). For this reason, Ortas et al. (2013) and O'Rourke (2003) state that the above-mentioned positive screening method recognizes cleaner production processes and innovations, which is important for capturing investment in cleaner production.

The use of cleaner production processes and innovation by companies could allow them to gain in productivity, due to (1) operational efficiencies resulting in cost savings, (2) the reduction of the cost of attracting top talent to the company and (3) the improvement of the margin coming from offering sustainability-advantaged products to customers, while at the same time reducing their exposure to risks, which gives companies a competitive advantage and improves their financial performance (Gallardo-Vázquez and Sanchez-Hernandez, 2014; O'Rourke, 2003). The higher financial performance of firms that adopt corporate social responsibility strategies for cleaner production could affect the financial performance achieved by mutual and pension fund managers who make their investment decisions based on sustainability (Barnett and Solomon, 2006; Freeman, 1984; Hill et al., 2007; Hillman and Keim, 2001; Humphrey and Lee, 2011; Kempf and Osthoff, 2007; Lee et al., 2010; Wahba, 2008). From the stakeholder theory perspective, ethical fund managers characterized by integrating environmental, human rights, social and/or stakeholder issues into their investment strategies could obtain a higher performance than conventional and solidarity mutual and pension fund managers (Ferruz et al., 2010; Gil-Bazo et al., 2010; Statman, 2000).

However fund managers who limit their universe of investment to firms that pass an ethical screening, might find themselves unable to adequately diversify the portfolios of ethical funds (Barnett and Solomon, 2006; Bauer et al., 2006; Cortez et al., 2009), losing investment opportunities while increasing information costs due to screening (Aslaksen and Synnestwedt, 2003). This could produce a lower risk-adjusted return from modern portfolio theory (Markowitz, 1952) as found by Jones et al. (2008). Adopting the postulates of portfolio theory based on building a diversified portfolio that maximizes return while minimizing risk, charity and solidarity fund managers offer the possibility of donating part of the revenues to charity or social projects by the investors and/or financial group promoting the fund (Signori, 2009). This could increase the costs of mutual and pension funds, reducing the risk-adjusted return with respect to conventional mutual funds.

Taking the above into account, the main aim of this paper is to determine which business strategy —traditional business strategy implemented in conventional funds, responsive social responsibility strategy adopted in solidarity funds or strategic social responsibility strategy used by ethical funds— enables pension fund managers to obtain a better risk-adjusted financial performance. Said pension fund industry has received less attention from researchers than the mutual fund industry probably because it is difficult to obtain reliable data. Consequently, this study gains importance.

This paper is organized as follows. The next section reviews the literature background of SRI and develops the hypotheses. After that, section three describes the research method. Section four reveals the results obtained and the final section draws some conclusions and discusses a future research agenda.

2. Literature review

The asset under management in socially responsible investing has increased from 2665.4 billion Euros at the end of 2007–6763.4 billion Euros at the end of 2011 in Europe according to the European Sustainable Investment Forum (Eurosif, 2012). The increasing popularity of socially responsible investing has attracted the interest of academics and practitioners to determine the effects of ethical screening on the financial performance of mutual funds and pension plans, typically finding that on a risk-adjusted basis, ethical funds do not underperform compared to conventional funds and their market benchmarks.

Thus, Mallin et al. (1995), using the single factor Jensen alpha model,[1] find ethical trusts underperform on the US market, obtaining an insignificantly higher performance than their matched conventional pairs, as appears in Statman (2000). This result is consistent with that obtained by Gregory et al. (1997) analyzing the UK ethical unit trusts market, and Capelle-Blancard and Monjon (2012) for the French equity and balanced socially responsible funds market. However, these findings should be interpreted with caution as the Jensen performance measure does not account for risk associated with small cap growth stocks (Bauer et al., 2005, 2007; Luther and Matatko, 1994) which could comprise a larger part of ethical equity and balanced portfolios (Cortez et al., 2012; Jones et al., 2008; Luther and Matatko, 1994). Consequently, the estimation of Jensen's alpha could be biased (Gregory et al., 1997).

To overcome this problem of omitted benchmarks, Luther and Matatko (1994) include two benchmarks, the broad market index and the index for companies with a low market capitalization, concluding that it is more appropriate to evaluate UK fund performance using a multi-index model than a single-index model, although the results confirm that there are no significant differences between ethical and conventional funds, as stated in Gregory et al. (1997) and Kreander et al. (2005). Similar findings show Cummings (2000) for the Australian market using a model with three common market benchmarks and Benson et al. (2006) for the US ethical mutual funds market using a model with different industry benchmarks representing the potential industry composition of the investment portfolio.

[1] The Jensen's Alpha is calculated as follows: $\alpha_m = (R_{mt}-R_{ft})-[\beta_b(\text{Benchmark}_t-R_{ft})+\varepsilon_{mt}]$. where α_m represents the added value of mutual funds' active management with respect to the benchmark. $R_{mt}-R_{ft}$ represents the excess return of the mutual fund m at moment t over the risk-free asset. β_b represents the systematic risk. ε_{mt} is the random error term.

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