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Socially Responsible Mutual Funds: the impact of fund governance on performance and attractiveness

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SOCIALLY RESPONSIBLE MUTUAL FUNDS: THE IMPACT OF FUND GOVERNANCE ON PERFORMANCE AND ATTRACTIVENESS

Enguerran Petit

ABSTRACT

SOCIALLY RESPONSIBLE MUTUAL FUNDS: THE IMPACT OF FUND GOVERNANCE ON PERFORMANCE AND ATTRACTIVENESS

Social Responsible Investing (SRI) is an investment process that combines investors' financial objectives with their concerns about Environmental, Social and Governance (ESG) issues (Eurosif, 2010). SRI funds are currently a key player in the capital markets. At the end of 2009, SRI assets represented over 40% of total assets under management in Europe (Eurosif, 2010). While this new "mainstream" approach is still in a phase of development, it is evolving at a steep pace, sustained by the European Union and its member states. Governments of different European countries have taken several initiatives aiming to foster the development of the SRI approach. For instance: the UK (2000), Sweden (2000), France (2001), Germany (2002), Austria (2004), Belgium (2004), Italy (2005), Denmark (2010), have regulations in place which require their pension funds to disclose to what extent their investment policies take into account social, environmental and ethical criteria. The first part of this thesis provides a comprehensive outline of the SRI initiatives in Europe to provide a background of the industry at present.

The second part of this thesis focuses on the governance of SRI mutual funds. A new type of fund governance is emerging due to the importance of the SRI approach in the fund industry. SRI fund governance must not only take into account the financial objectives of the fund but its extra financial objectives as well in order to reduce the agency problem. Previous literature has focused on traditional mechanisms of fund governance, whose goal is to ensure that fund managers act in the best interest of their shareholder through profit maximization. Most research in this area has studied the impact of board structure, directors' compensation, and fee level on fund performance. To the best of my knowledge, the extant literature has not yet examined the specificities of fund governance in a Socially Responsible Investing context, taking into account ESG policies and objectives. The aim of this section is to examine the impact of SRI fund governance on 1) fund performance and 2) the attractiveness of the fund for investors. SRI fund governance is assessed through three axes: 1) the disclosure policy, 2) the engagement policy and 3) the SRI research structure. The following related hypotheses are posed: First, disclosure is a means to attract investors, by reducing information asymmetry and the agency problem. However, too much disclosure imposes a proprietary cost which may harm the fund performance. Second, an active shareholder activism policy on ESG criteria may increase fund performance by preventing ESG risks through improved stakeholder relations (e.g. by fostering customer loyalty, raising employee motivation and efficiency, etc.). Finally, SRI research produces valuable information, which the fund may use to improve its

performance. Hence, the nature of the research team, whether it is in-housed or outsourced, would alter the quality of the information produced and consequently would affect the fund's performance.

I test the previous hypotheses on a dataset of 102 SRI European mutual funds. I find evidence that excessive transparency, related to the disclosure about the sources and methods used to select the portfolio reduces the performance of the funds by up to 10.09% at a 1% confidence level. On the contrary, a controlled transparency has no negative impact on fund performance, but increases the risk borne by investors. Shareholder activism has an ambiguous impact on the fund performance. While a constant dialogue with the investee companies about SRI issues appears to improve the fund performance, a deep SRI involvement appears to impact it negatively. That is, the marginal positive effect on the performance generated by deep SRI involvement, does not cover its cost. Finally, performing ESG analysis internally increases the fund performance. Hence the SRI research team produces valuable information for the selection of the portfolio. I find that funds with an in-house SRI research team perform better at the 5% level than the ones which externalize this activity.

As an additional analysis, I examine the impact on financial risk and money flow. I find that the risk borne by investors is likewise affected by the fund governance. Disclosure to the investee companies of their ESG profile and the use of formal shareholders rights on SRI issues tend to significantly decrease risk, while SRI research performed internally increases it. Weak results support the existence of increased money flow towards funds with a strong disclosure policy and a strong engagement policy. Lastly, the externalization of ESG analysis to a dedicated company creates a disincentive for the investors to invest in a fund.

RESUME

FONDS COMMUNS DE PLACEMENT SOCIALEMENT RESPONSABLE: L'IMPACT DE LA GOUVERNANCE DES FONDS SUR LA PERFORMANCE ET L'ATTRACTIVITE

L'Investissement Socialement Responsable (ISR) est « un terme générique couvrant tout type d'investissement qui allie les objectifs financiers des investisseurs et leurs préoccupations face aux questions environnementales, sociétales et de gouvernance (ESG) » (Eurosif, 2010). Les fonds ISR sont devenus depuis la fin des années 2000 un acteur clef du marché des capitaux aux cotés des fonds d'investissement dits conventionnels. Les actifs ISR représentaient fin 2009 plus de 40% des actifs gérés par des fonds d'investissement en Europe (Eurosif, 2010). Cette nouvelle mainstream approche (ou courant principal), bien que demeurant émergente, évolue rapidement soutenue par l'Union Européenne et ses pays membres. De nombreuses initiatives ayant pour but la promotion de l'approche ISR ont été prises par différents gouvernements européens. A ce jour, le Royaume-Unis (2000), la Suède (2000), la France (2001), l'Allemagne (2002), l'Autriche (2004), la Belgique (2004), l'Italie (2005), le Danemark (2010) ont mis en place une réglementation obligeant les fonds de pension à détailler la manière dont les critères Sociaux, Environnementaux et Ethiques sont pris en compte dans la politique d'investissement. La première partie de ce mémoire détaille les différentes initiatives ISR en Europe dans le but de présenter un état des lieux de ce secteur.

La seconde partie du mémoire se concentre sur la gouvernance des fonds communs de placement ISR. Suite à l'importance prise par l'approche ISR dans la gestion d'actifs, un nouveau type de gouvernance émerge. En effet la gouvernance des fonds ISR ne doit pas seulement tenir compte des objectifs financiers des fonds, mais aussi de leurs buts concernant les critères extra-financiers afin de réduire le problème principal-agent. La littérature existante aborde principalement les mécanismes traditionnels de gouvernance des fonds, dont le but est d'assurer la gestion du fond dans l'intérêt de l'investisseur : en maximisant les profits. La plupart des recherches faites sur ce sujet étudie l'impact de la composition du comité d'administration, des compensations financières de ses membres ou du taux des frais de gestion du fonds, sur la performance des fonds. A ma connaissance, la littérature existante n'a pas encore étudié ce qui constitue la spécificité de la gouvernance des fonds dans le contexte de l'Investissement Socialement Responsable en prenant en compte les politiques et objectifs Environnementaux, Sociaux et de Gouvernance (ESG). Cette partie vise à examiner l'impact de la gouvernance des fonds ISR au travers de trois axes : 1) la politique en matière de transparence, 2) la politique d'engagement et 3) la structure de recherche ISR. Les hypothèses qui suivent sont ainsi posées : Premièrement la transparence est un moyen d'attirer les investisseurs en réduisant l'asymétrie de l'information entre le gérant et les investisseurs, et en

résolvant le problème principal-agent. Néanmoins une transparence excessive peut être coûteuse et nuire à la performance. Deuxièmement, un engagement actif du fond sur les critères ESG, devrait accroitre la performance du fond en prévenant les risques ESG grâce aux meilleures relations des sociétés, dans lequel le fond a investi, avec leurs parties prenantes (promouvoir la fidélité des clients, augmenter la productivité des salariés et accroître leur motivation). Enfin le département de recherche ISR produit de l'information que le fonds peut utiliser pour améliorer sa performance. La nature de celui-ci, interne ou externalisé, peut altérer la « qualité » de l'information produite et par conséquent affecter la performance du fond.

Je teste les précédentes hypothèses sur une base de données de 102 fonds communs de placement ISR européens. Je démontre qu'une transparence excessive telle que la publication des sources et méthodes utilisées pour la constitution du portefeuille d'investissement réduit la performance des fonds jusqu'a 10.9% à un taux de confiance statistique de 99%. Au contraire une transparence maitrisée n'a pas d'impact sur la performance du fonds mais accroit le risque supporté par les investisseurs. L'engagement à un impact ambigu sur la performance des fonds. Si un dialogue constant avec les entreprises dont le fonds est actionnaire sur les questions ESG semble améliorer la performance du fonds, un engagement fort semble l'impacter négativement. En effet l'effet marginal positif sur la performance, généré par une forte implication concernant l'ISR, ne couvre pas son coût. Enfin l'exécution de manière interne de recherche ESG augmente la performance des fonds. La recherche ISR produit donc des informations de valeurs pour la construction du portefeuille d'investissement. Je démontre également que les fonds ayant un département interne de recherche ISR surperforment, avec un taux de confiance de 95%, les fonds ayant externalisé cette activité.

J'examine en outre l'impact de la gouvernance ISR des fonds sur le risque financier et sur les flux d'investissement. Je constate que le risque supporté par les investisseurs est également affecté par la gouvernance des fonds. L'envoi(e) aux entreprises, dans le quel le fonds est actionnaire, de leur profil ESG et l'utilisation des droits réglementaires d'actionnaires sur des questions ISR permettent de diminuer de manière significative le risque. Inversement la recherche ISR exécutée de manière interne l'augmente. L'existence d'un flux d'investissement accru vers les fonds ayant une forte politique en matière de transparence et une politique d'engagement soutenue est faiblement supportée par les résultats obtenus. Enfin l'externalisation de l'activité de recherche ESG réduit l'intérêt des investisseurs à investir dans le fonds considéré.

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TABLE

FIGURE

"The life of money-making is one undertaken under compulsion, and wealth is evidently not the good we are seeking; for it is merely useful and for the sake of something else."

Aristotle, written around 350 B.C.[2]

[2] The Nicomachean Ethics, Book 1.5; in the translation by Ross (1980)

1. Introduction

Contrary to what most people and academic researchers thought in the 60s, the investors' behavior is not motivated only by the profit maximization; many people diverge from this rational behavior. Several biases and failures have been found to the Rational Investors Paradigm since this period: anchoring, framing, conservatism, trade on noise or cognitive biases… are some of them (Peterson, 2002; Slovic, 1995). Several studies gave evidences than investors choices of investments depend also on demographic factors (age, sex…), investors' life style as well as emotional factors such as "feelings for firms' products and services" (Lease, Lewellen, & Schlarbaum, 1976; Nagy & Obenberger, 1994). The investors would indeed expect expressive benefits from their investments different from wealth return. Beal et al. (2005) argue that the psychic return (fashion, the way the peer groups perceive the investments, the feeling to help people or contribute to protect the environment) is one of the aspects of the expressive benefits the investors get from its investments. The authors claim that the investments decision is a tradeoff between the profit maximization, and the expressive benefits the investors can get from it. The Social Responsible Investing mutual fund segment is one sector of the financial industry which allows to investors getting market rate return with expressive benefits.

In the first part of the paper, I review the institutional aspects as well as recent trends and development in the European SRI market. In particular I provide a brief historic of the birth of the modern SRI industry, beginning with its traditional religious roots. I report a short overview of the European SRI market which has boomed in the last decades to achieve nowadays the amount of €5 trillion of assets under management, and explicit the different SRI strategies used in Europe. Finally I detail the regulatory background and initiatives undertaken to foster the SRI development at the European Union level as well as at its states' members' level.

Second I study whether the SRI fund governance impacts the performance of the SRI mutual funds through the funds' transparency policy, their SRI specialization and their shareholder activism policy. I find evidences of mixed effects concerning the transparency and shareholder activism policy while the SRI in-house research seems to be beneficial to the funds' performance. I furthermore examine the impacts of these same determinants on the funds' systematical risk beta, as well as on the risk bear by the investors. A greater transparency and a SRI in-house research team seem to increase slightly both risk types, while the shareholder activism tends to decrease them, even if a mixed occurred for this last criteria.

Third I discuss whether the fund attractiveness measured as the fund size growth rate due to money inflow, is affected by the SRI fund governance. The results show evidences that the transparency and the shareholder activism in a least measure tend to attract investors, while funds which outsource the SRI analysis seem to decrease the interest of the investors.

This study differs from the previous literature on the SRI mutual fund industry. The academic researchers have indeed mainly studied the relation fund performance and SRI strategies between SRI mutual funds and conventional counterparts or within SRI mutual funds. They have also addressed particular aspects of the SRI fund governance as the fee, the transparency on financial information, or the shareholder activism (Gil-Bazo, Ruiz-Verdù, & Santos, 2010; Wen, 2009; Haigh & Guthrie, 2010; Barnett & Salomon, 2006; Renneboog, Ter Horst, & Zhang, 2008a). It differs also from the literature on the mutual fund governance which focuses mainly on the fee and board of director's structure and compensation. Furthermore their sample did not study specifically the SRI mutual funds. As far as I know this paper is the first comprehensive study on the impacts of the SRI fund governance.

The remainder of the paper is organized as follows. Section 2 introduces first the SRI mutual fund industry in Europe and presents the different initiatives and laws undertook by the different European governments to foster the SRI fund industry development. Then it surveys the literature on the relation between SRI fund governance and fund performance, as well as fund attractiveness. At the end of this section a set of testable hypotheses is proposed. Section 3 presents the data used in the study. Section 4 examines the determinants of the risk-adjusted returns, loading risk and growth rate of the fund size beyond assets appreciation of the European SRI mutual funds. Section 5 concludes.

2. Literature Review

2.1. The Social Responsible Investment Fund Industry

The following section will consist in an analysis and description of the social responsible investment (SRI) mutual fund industry, in order to understand in a comprehensive way: the sector, its context of development, and the regulation enacted by the different European governments.

2.1.1. Definition of the Social Responsible Investing Approach

The social investing approach has a scope much wider than the only mutual fund industry; it concerns all the investments which "seek to produce both financial and social, environmental value and return" (Emerson, Bonini, & Brehm, 2003, p. 41). Emerson (2003) divides this investment method into two subcategories:

> -The Social Responsible Investing whose key players are the mutual funds, fund managers, pension funds and foundations.
>
> -The Community and Double Bottom Line Investing which are more focus on the production of social and environmental value. According to the "ethical financial institutions" (for example ethical bank as Triodos Bank in UK), the private equity funds or venture capitalist, the financial aspect is bellow market rate financial return due to a greater concern of social and environmental value, or is on the contrary at the market rate return, the investors refusing any discounts.

The following study considers only the Social Responsible Investing which aims using different strategies such as the screening or the shareholder activism to achieve a full market return with some social or, and environmental components.

The practitioners or academic researchers are quite prolific in the literature to provide some definitions of the SRI. A common definition is still under debate. Nevertheless, they all agree in these different definitions on some common features highlighting the seeking of financial return through investment fulfilling social and or environmental responsibilities: "[it is] the exercise of ethical and social criteria in the selection and management of investment portfolio, generally consisting of company shares (stocks)" (Cowton, 1994). The definition proposed by Sparkes (Sparkes R. , 2001, p. 201) stresses the combination of these different aspects:

> The key distinguishing feature of socially responsible investment lies in its combination of social and environmental goals with the financial objective of achieving a return on invested capital approaching that of the market.

Schepers and Sethi (2003, p. 13) take the SRI definition in its inclusive way as the philosophy or approach of constructing and managing investment, "using a non-financial screen, in addition to financial screens, to either exclude or targeted companies for investment purposes".

In this paper we will refer to the definition provides by Eurosif, a pan-European network and think-tank which aims to promote the sustainability in the financial market. It defines the Socially Responsible Investment as "a generic term covering any type of investment process that combines investors' financial objectives with their concerns about Environmental, Social and Governance (ESG) issues" (Eurosif, 2010).

2.1.2. Historic of the SRI

2.1.2.1. The origin of the SRI fund industry: an old tradition

The birth of the ethical investing approach has ancient Greek, Jewish, Christian and Islamic tradition. The Torah provides some rules on how use the money in an ethical way[3]. The Jewish were for a long time, until the 19th century, the lenders for the Europe as well as for the Arabic world due to the restrictions on the usury formulated in the Bible[4] and the Koran. The Catholic Church prohibited universally the usury in 1139, but authorized in 1205 to borrow with interest, the interest being assimilated to compensation. Following the rules enacted by the Koran, the Muslims investors avoid investing in companies involved in pork production, alcohol, gambling and in interest-based financial institutions (Attali, 2010; Lewison, 1999; Glaeser & Scheinkman, 1998).

The Religious Society of Friends (Quakers), prohibited, in 1758 at the Philadelphia Yearly Meeting, members from participating into the slave and weapon trade. The founder of Methodism John Wesley (1703-1791) in its sermon "Use of Money", called on its faithful to avoid to invest into the so called sinful companies, such those who earned their money through alcohol, tobacco, gambling, weapon…, but also into the companies which harm the neighborhood or the health of their workers. The Pioneer Fund in 1928 was the first mutual fund using a "sin screen" to exclude companies associated with products such as alcohol and tobacco (Renneboog, Ter Horst, & Zhang, 2008a).

2.1.2.2. The modern SRI industry

Unlike the previous years and even centuries where investors screened the companies on the basis of religious traditions, with the 1960s the modern concept of SRI appears. The investors screened rather on

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[3] See e.g., Maimonides, Mishneh Torah, Laws of the Gifts to Poor 10:7 "there are eight degrees of tzedakah (righteous giving), one above the other. The highest degree is to strengthen the hand of a poor person by making a gift or a loan, or entering into a partnership, or finding work for him/her, so that they become self-sufficient".

[4] See e.g., Deuteronomy 23:19 "You shall not charge interest to your countrymen: interest on money, food, or anything that may be loaned at interest; but you may charge interest from loans to foreigners" and Luke 6:35 "lend freely, hoping nothing in return".

varying personal principles, ethics or social convictions. This phenomenon appears for the first time during the Vietnam War, where the dissatisfaction among students and young people led them to protest against the war and to boycott the companies providing weapons used in it. These concerns, incorporated by some investors, allowed in 1971 the creation of the first modern SRI mutual fund, the Pax World fund, which avoided investing in companies significantly involved in manufacture of weapons, or weapon-related-products. The rise of the civil rights and racial equality in Europe and US, confirmed with the Civil Right Act in 1964 and the Voting Right Act in 1965, contributed to increase the pressure on the racist system of apartheid in South Africa. It became a focal point of protest by American and European social investors who withdrew money from companies with operations in South Africa, and forced firms to close or divest operations in this country. In 1986, a law of California State required that the state's pension funds divest from companies with activities in South Africa, the amount concerned was over $6 billion (Sparkes R. , 2002, p. 54).

The environmental issue appeared early in the 1970s, strengthened in 1979 with the accident at the US Three Mile Island nuclear power plant, became an important concern for the social responsible investors in 1986 with the catastrophe at the Chernobyl nuclear power plant in Ukraine. Three years later in 1989 the shipwreck of the Exxon Valdez, an oil supertanker, near Alaska provoked a huge oil spill of 11 million gallons of oil. It was at this time the biggest environmental disaster the US had ever known. All these catastrophes made investors more aware of the environmental consequences of bad practices in the industry.

The 1980s knew an acceleration in the foundation of SRI mutual funds, with for example the birth of the Dreyfus 3rd Century Fund, Parnassus Fund or Calvert Social Investment Fund Balanced Portfolio. The investment strategies evolved on the same time, the fund using no longer only negative screens but also positive ones to their stocks' selection (See 2.1.4.2 The positive screens). The sufficient proliferation of SRI mutual funds associated with the growth in popularity as investing approach conduced, by 1990, to the creation of the first social responsible index, the Domini 400 Social Index. It selects among the public US equities, 400 large capitalization companies based on wide range of Environmental, Social and Governance (ESG) criteria. The significant growth of SRI as investing approach in the US, Europe but also in the rest of the world was helped by the strong development of the ethical consumerism, where the consumer is willing to pay a premium for products (or services), whose production (or providing) is consistent with its personal values (Sparkes R. , 2002, p. 63). The growth of the ethical market in UK, the biggest in Europe, increased from £9.6 billion in 1998 to £32.3 billion in 2006 (Co-operative Bank (Co-op), 2007).

The several corporate scandals, in the 2000s, such as Enron in the US in 2001 or Parmalat in Italy in 2003, gave rise to the need of strong corporate governance from the point of view of the investors. The financial crisis of 2007-2008, stressed the importance of the corporate governance as safeguard role. A report of the OECD published in the beginning of 2009 concluded that:

> "The financial crisis can be to an important extent attributed to failures and weaknesses in corporate government arrangements. […]Company disclosures about foreseeable risk factors and about the systems in place for monitoring and managing risk have also left a lot to be desired even though this is a key element of the Principles[5]. […] Last but not least, remuneration systems have in a number of cases not been closely related to the strategy and risk appetite of the company and its longer term interests." (Kirkpatrick (OECD), 2009)

More recently the oil spill due to the explosion and to the sinking of the Deepwater Horizon drilling platform in Gulf of Mexico, on April 20th 2010, with a cost of $41 billion[6] for BP Plc. strengthened criteria such as transparency, corporate governance or sustainability which appears to be key SRI screens.

2.1.3. SRI fund industry overview in Europe

The SRI market has experienced a strong growth over the past years around the world. The assets under management have jumped from €1.1 trillion in 2005 to €5 trillion at the end of 2009. The crisis of 2007 and 2008 didn't stop the trend but on the contrary strengthened it. The two main poles for SRI in the world are the United States and Europe with each, respectively at the end of 2009, €1,514 billion and €4,986 billion of assets under management (AUM)[7]; the Canada, Japan and Australia account at the end of 2009 for only €456 billion[6] (the Canada represents around 90% of this amount).

2.1.3.1. A first outlook in the United State

The United State is one of the oldest SRI markets. Its SRI universe has grown from $639 billion in 1995 to $3,070 billion in 2010 or a growth of 380% whereas in the same time the whole universe of AUM has increased only by 260%. It is interesting to notice that from 1999 to 2006, the growth kept the same pace than broader US financial market and that between 2007 and 2009, the crisis period, the SRI assets under management have grown by more than 13%, when the total universe of professionally managed assets remained roughly flat. The share of the SRI approach achieved, in 2009, more than 12% of the total assets under management. (Social Investment Forum (SIF), 2010).

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[5] The OECD Principles of Corporate Governance, cover six key areas of corporate governance:

1. Ensuring the basis for an effective corporate governance framework
2. The rights of shareholders and key ownerships functions
3. The equitable treatment of shareholders
4. The role of stakeholders in corporate governance
5. Disclosure and transparency
6. The responsibilities of the board

[6] Annual Report (BP, 2010) Available at www.bp.com/annualreport

[7] (Eurosif, 2010)

The institutional investors, with $2.3 trillion involved in SRI strategies, are the major players of the SRI market. The ESG integration into investment analysis and the portfolio construction constitutes with the shareholder advocacy the two main SRI strategies accounting respectively each for $2.5 and $1.5 trillion. The main reason for the strong growth of the ESG integration is due both to the demand side, for 85% of the money managers according to a survey of the Social Investment Forum (2010), and to the pressure of the legislation.

As it was the case with the apartheid in South Africa, the SRI financial sector targets nowadays the investments in Sudan due to its involvement in the genocide in Darfur, and to the risks to operate in this country. A large number of institutions and money managers, with more than $1.5 trillion in combined assets, have divested from companies with operations there. Moreover many investors have raised concerns directly to the companies about their operations in Sudan. This concern has become the first negative screen in term of assets impacted, for the mutual fund industry before tobacco, alcohol and gambling.

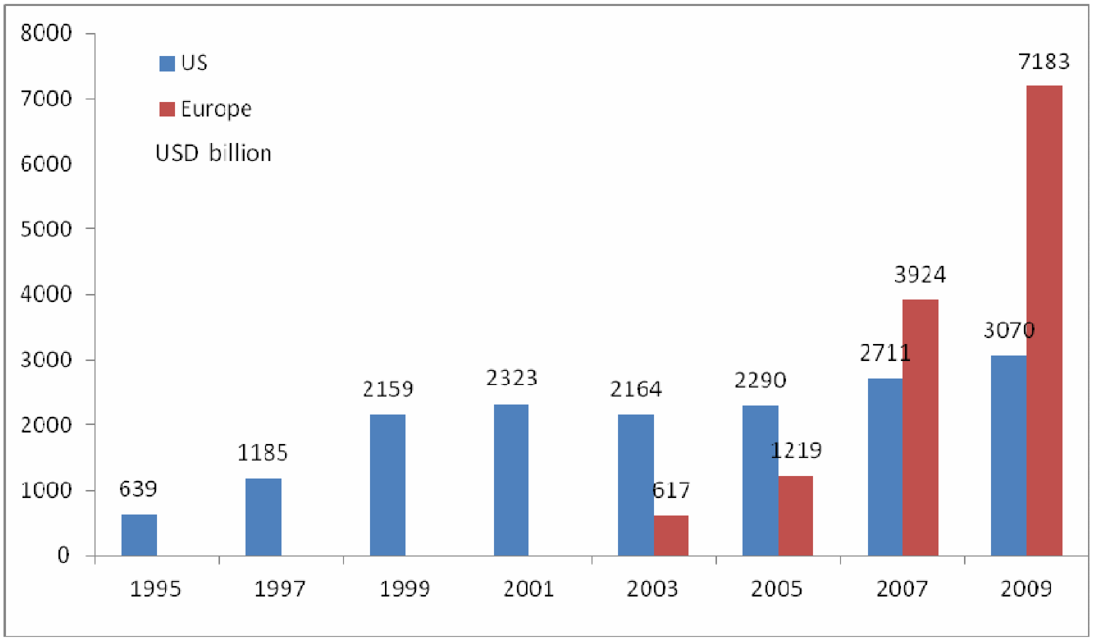
The narrower market of retail mutual fund totalized $316.9 billion of assets under management at the end of the year 2009. The overall number of fund incorporating ESG criteria has increased by 45% since 2007 to reach 250 in 2009 while on the same period the assets under management have risen by 11% (Social Investment Forum (SIF), 2010).

2.1.3.2. Europe: the largest SRI market

After having caught up in 2007 the US SRI market and despite its earlier stage of development, the European SRI universe has passed the size of the US one in term of assets under management to reach an amount of €5 trillion. The market has boomed during the crisis period, increasing from €2.7 trillion in 2007 to €5 trillion at the end of 2009 or a growth of around 87% on like-for-like basis[8]. It represents now more than 41% of the overall investments universe, and therefore can be qualified of mainstreaming approach. The number of SRI mutual funds, which are only a small part of the SRI market, has doubled between 2007 and 2010 to achieve 879 mutual funds for around €75 billion (Vigeo, 2010; Eurosif, 2010). It is worth to notice that mutual fund as well as pension fund experienced an increasing media attention and public pressure about the way they include ESG issues in their investment approach. It was particularly the case in Netherlands where the broadcasting of Zembla documentary called “the cluster bomb feeling” acted as an accelerator to implement SRI policies for the frontrunners and a wake-up call for the others.

[8] The growth is computed referring to the 13 countries covered by the previous study of Eurosif in 2008; the study of 2010 increased its scope to 6 other European countries.

Figure 1: Socially Responsible Investing In the US and in Europe (1995-2010)



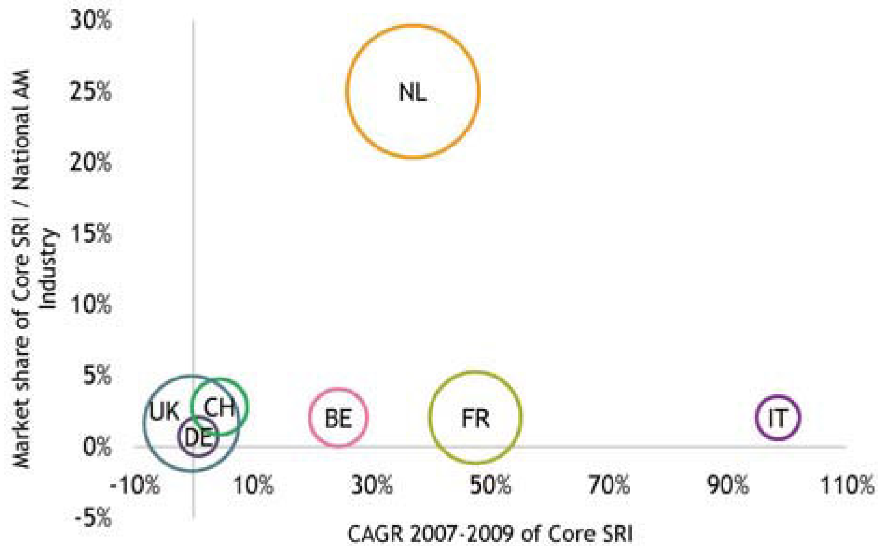
The SRI market in Europe expanded more than in the US and was larger in 2009. *Source*: Social Investment Forum Foundation (2010) & Eurosif SRI Study (2010) (the market coverage is not constant: 8 countries were covered in 2002, 9 in 2005, 13 in 2007 and 19 in 2009; assets were converted using year-end exchange rates).

The SRI universe is not homogeneous across Europe, but is rather strongly related to the cultural characteristics of each country and to its regulation about the SRI issues. Nevertheless some general trends or schemes can be identified. The European SRI market remains largely driven by the institutional investors which represent 92% of the ethical investments. If in some countries like Norway, Netherlands or UK the share of the institutional investors overtakes the 95%, in France, Belgium or Sweden it does not exceed the 75% and even the 50% in Germany or Switzerland. The presence of the High Net Worth Individuals (HNWI) is growing and becomes more and more relevant, with at the end of the year 2009 an amount of €729 billion or 11% of the total European HNWIs' portfolio. The Eurosif study on the High Net Worth Individuals and Sustainable Investment (2010) forecasts furthermore that this share will increase to 15% by 2013, just below the €1.2 trillion threshold. The microfinance[9] gains more and more the trust and interest of the investors; indeed even if "the financial crisis struck the Microfinance Institutions considerably, […] they

[9] "The practice of awarding small loans, usually to owner operated micro-enterprises. The micro-finance can also involve savings facilities requiring no (or very low) minimum deposits; and other financial services such as insurance, money transfer or bill payment programs, designed for people on low incomes, and structured to build/protect assets" (Emerson, Bonini, & Brehm, 2003).

have shown greater resilience than many traditional banks" (Eurosif, 2010). Eurosif estimates the European SRI Microfinance investments reached €1 trillion at the end of 2009.

Figure 2: Growth, market share and size of core SRI

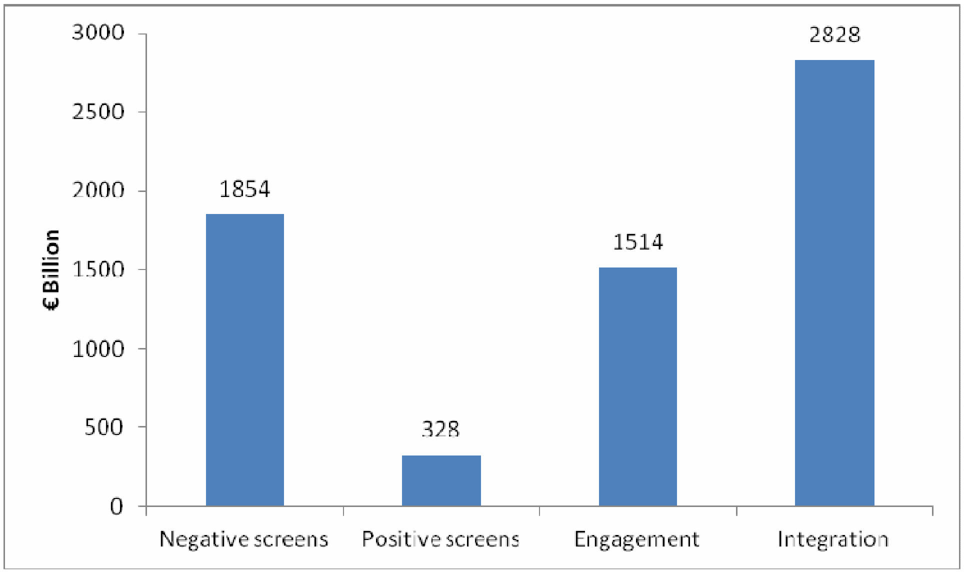


Source: Eurosif European SRI Survey, 2010
Note: Bubble size represents the size of Core SRI. The chart only includes countries which showed comparable data. Core SRI is composed of the norms and values/ ethical based exclusions as well as the positive screening according to Eurosif (2010).

2.1.4. The different strategies approach

The funds have developed along the years several different methods in order to invest in companies in a socially responsible way. Three main different approaches are particularly used: the negative screens, the positive screens and the shareholder activism. A new method, the ESG integration, has boomed in the last year especially in France, Netherland and Belgium (Eurosif, 2010).

Figure 3: SRI strategy at the end of 2009 (Eurosif, 2010)



2.1.4.1. *The negative screens*

The negative screening is the oldest SRI approach; it was used for the first time on the 17^{th} by the Quakers based on religious principles. The fund manager excludes from its SRI investment portfolio, stocks of companies based on environmental, social and ethical criteria. A distinction can be done between the "sinful" screens based on religious criteria (companies involved in the production of tobacco, alcohol or pork for the Islamic investors) and the "harmful" screens based on social or environmental factors (violation of human rights, animal testing or poor workplace conditions) (See Table 1 SRI screens). This filter is applied by funds, which accounts for €1.9 trillion out of the €5 trillion SRI assets in Europe (Eurosif, 2010). Once the initial pool of companies, Stoxx Europe 600 for example, is screened the funds apply on the output a financial and quantitative analysis in order to build the investment portfolio. The screen can be extended to the branches and suppliers of the considered companies in order to insure that its whole environment or supply chain complies with the exclusion criteria applied. Another variant is to exclude only the firms from the investment universe when these firms' revenues derived from "a-social or unethical" sector exceed a specific threshold (Renneboog, Ter Horst, & Zhang, 2008a). Schepers and Sethi (2003) present the limits of such a method which is passive, absolute, unidimensional and arbitrary. The corporations, which are more and more complex especially the large one (several product lines, multiple branches or business divisions), do not fit in a single simplistic rationale.

2.1.4.2. *The positive screens*

The positive screens, or second generation of SRI screens, are used by funds which account for €328 billion out of the €5 trillion SRI assets in Europe (Eurosif, 2010). They aim to select corporations with higher Corporate Social Responsibility (CSR) norms. The investment universe is usually firstly "pre-screened" with financial criteria which allows excluding the companies performing poorly. One or multiple attributes measured through various criteria allow assessing the acceptability or desirability of the corporations as SRI investment vehicles. It is a way to reward companies with strong corporate social responsibility and to encourage them to increase their performance concerning the ESG criteria. This approach knows notwithstanding several weaknesses: the criteria, which are evaluated, may not always fully represent the attributes (ambiguity, inconsistency) and the measures of the performances of these criteria are often biased due to a wrong methodology (Schepers & Sethi, 2003).

The "best in class" approach derived from the positive screening. The firms, within each sector or industry, are ranked in function of the ESG criteria. The firms which pass a minimum threshold or which are the best of their sectors are eligible to take part to the SRI Investment portfolio. This method allows bringing some flexibility in the construction of the portfolio in considering companies of some sectors, as mining, which might not pass the threshold. This method used at a large extent in France, Belgium and Finland accounts for €148 billion (Eurosif, 2010; Schepers & Sethi, 2003).

Finally the thematic sustainability funds, according to Allianz Global Investors (2010), will grow in importance in the next decades. The most of these funds are currently oriented toward the clean energy sector: wind power, geothermal or solar energy (Eurosif, 2010).

2.1.4.3. Shareholder Activism, Engagement

This topic will be developed at length later in this section (see 2.2.2.2 Shareholder Activism). Nevertheless it is interesting to notice that this practice represents €1.5 trillion and that it is mainly used in UK, Netherland and Nordic countries. The shareholder activism aims to influence the CSR of the companies through direct dialogue with the management, the use of voting rights, the submission of resolutions to the general annual meeting, or the threat of an extraordinary general meeting. The results of this approach are discussed and contested in several publications.

2.1.4.4. ESG Integration

The integration approach corresponds to the inclusion of the ESG criteria into the traditional financial analysis. It represents the mainstream of the SRI with €2.8 trillion assets under management at the end of 2009. This practice is booming. In France the assets under management, concerned by ESG integration, are passed from €66 billion to at least €2,460 billion by the end of 2009[10] or an increase by 3,630% (Novethic, 2010). Nevertheless the Novethic study nuances: "the extra-financial requirements imposed on the assets subject to ESG integration are not as strict as those imposed on SRI funds, and practices can vary widely

[10] This figure represents total assets under management declared by those surveyed as covered by at least one ESG integration practice described in the Novethic study (Novethic, 2010). Novethic, part of Caisse des Dépôts et Consignations (a French public long term investors), is the leading research centre in France on Corporate Social Responsibility (CSR) and Socially Responsible Investment (SRI) and a sustainable development media expert.

from one manager to another. […] These approaches are spreading but the concepts behind them remain elusive. […]ESG integration is applied on a case-by-case basis. Most often, it only covers the extra-financial issues considered to have a direct impact on medium- to long-term company performance".

Table 1 SRI screens

Screens	Definitions	Type
Tobacco	Avoid producers of tobacco products	-
Alcohol	Avoid the firms that produce, market or promote the consumption of alcoholic beverage	-
Gambling	Avoid casinos and suppliers of gambling equipment	-
Defense/weapons	Avoid firms producing weapons for domestic or foreign militaries, or firearms for personal use	-
Nuclear Power	Avoid manufacturers of nuclear reactors, or related equipment and companies that operate nuclear power plants	-
Irresponsible foreign operation	Avoid government controlled or private firms located in oppressive regimes such as Burma, China or firms which mistreat the indigenous people of developing countries Avoid firms that conduct business in countries identifies as state sponsors of terrorism or with connections with terrorist organizations Avoid firms with business operations in Sudan that have a relationship with the government, impart minimal benefits to the country's population	-
Pornography/adult entertainment	Avoid publishers of pornographic magazines; production studio that produce offensive video and audio records; companies that are major sponsors of graphic sex and violence on television	-
Abortion/birth control	Avoid providers of abortion; manufacturers of abortion drugs and birth control products; insurance companies that pay for elective abortions (where not mandated by law); companies that provide financial support to Planned Parenthood	-
Labor relations and workplace conditions	Seeks companies with strong union relationships, employees' empowerment, and /or employee profit sharing Avoid firms exploiting their workforce and sweatshops	+ -
Environment	Seeks firms with proactive involvement in recycling, waste reduction and environmental cleanup Avoid firms producing toxic products and contributing to global warming	+ -
Corporate governance	Seek companies demonstrating "best practices" related to board independence and election, auditor independence, executive compensation, expensing of options, voting rights and other governance issues Avoid firms with antitrust violation, consumer fraud and marketing scandal	+ -
Business practice	Seeks companies committed to sustainability through investment in R&D, quality assurance, product safety	+
Employment diversity	Seeks firms pursuing an active policy related to the employment of minorities, women, and or disabled persons who ought to be represented amongst senior management	+
Human rights	Seek firms promoting human rights standards Avoid firms which are complicit with human rights violations	+ -
Animal testing	Seek firms promoting the respectful treatment of animals Avoid firms with animal testing and firms producing hunting/trapping equipment or using animals in end products	+ -
Renewable energy	Seek firms producing power derived from renewable energy sources	+
Biotechnology	Seek firms that support sustainable agriculture, biodiversity, local farmers and industrial applications of biotechnology Avoid firms involved in the promotion or development of genetic engineering for agricultural applications	+ -
Community	Seek firms with proactive investments in the local community by sponsoring	+

Screens	Definitions	Type
involvement	charitable donations, employee volunteerism, and/or housing and educational programs	
Shareholder activism	The SRI funds that attempt to influence company actions through direct dialogue with management and/or voting at Annual General Meeting	+
Non married	Avoid insurance companies that give coverage to non married couples	-
Healthcare/pharmaceuticals	Avoid healthcare industries (used by the "Christian Scientist" religious group)	-
Interest based financial institutions	Avoid financial institutions that derive a significant proportion of their income from interests earnings (Used by funds managed according to Islamic principles)	-
Pork producers	Avoid companies that derive a significant portion of their income from the manufacturing or marketing of pork products (Used by funds managed according to Islamic principles)	-

This table summarizes the main screens used by the mutual fund. On the right column the sign "-" indicate a negative screens whereas the sign"+" indicate a positive one. The data come from Social Investment Forum (2010) and (Renneboog, Ter Horst, & Zhang, 2008a)

2.1.5. SRI regulation in Europe

The growth of the SRI as investment approach is partly due to the enactment of different laws across Europe. In the following part are reviewed the different regulations passed by the national government regarding the disclosure and transparency of social environmental and ethical information by the different actors of the SRI universe, and the regulatory initiatives on the European level.

2.1.5.1. Is there a common regulation about the ESG disclosure in Europe?

For instance there is no specific regulation in Europe concerning the SRI despite the strong lobbying by Eurosif notably, and a resolution approved by the European Parliament on CSR in 2007 underlying the importance of disclosure in the three following articles (European Parliament, 2007):

- Article 16 describes the European Parliament's recognition of the important role of the investors as stakeholder in the CSR debate and that "there must remain the opportunity for a sustained dialogue to achieve agreed goals".
- In Article 27, the European Commission is asked to revise the Fourth Council Directive 78/660/EEC of 25 July 1978 based on Article 54(3)(g) of the "Treaty on the annual accounts of certain types of companies" in order to add the social and environmental reporting to the financial reporting.
- In Article 33, the European Commission is called to think about a "statement of interest principles for investment funds" throughout the European Union to force mutual funds and pension funds to disclose and report how the ESG are taking into account.

Nevertheless the European Commission is involved on this subject since 2001 with the organization of the First European Conference on Triple Bottom Line Investing in Europe, which conduce shortly afterward the European Commission to invite pension funds, trustees and mutual funds to disclose at which extent the ESG criteria are taking into account in the construction of their portfolios (European Commision, 2002). In 2004 the European Commission developed a European Transparency Code whose onus is to harmonize across Europe the disclosure of extra financial information and to improve the clarity on principles and processes of SRI mutual funds. On January 2011, 350 mutual funds signed up the Transparency Code, and were allowed to use the specific logo of this code. Finally the European Council (2006) stated that the European Investment Banks has to consider the sustainability in its investment decisions.

In 2010 and at the beginning of 2011 the European Commission has undergone a public consultation about the disclosure of non financial information by companies, including the issue of the disclosure of non financial information by institutional investors, as well as a public debate on pension fund, considering notably the sustainable dimension. This process, undertaken by the Directorate General for Internal Market and Services of the European Commission, shows the will to have a common regulation at the EU level on this issue.

Table 2: SRI initiatives

Country	SRI related initiatives
EU	In July 2002, the European Commission invited institutional investors to disclose at which extent they consider social, environmental, and ethical and governance criteria in their investment decisions. Launch in 2004 by the European Commission and reviewed in 2010, the Transparency Code provides a homogeneous guidance to the SRI mutual fund across Europe to disclose their non financial information. In June 2006, the European Council forced, with the revision of EU Sustainable Development Strategy, the European Investment to consider the sustainability in its investment decisions.
Austria	Creation of an informational initiative through the development of the gruenesgeld.at website. Since 2004 the voluntary occupational pension funds have to disclose whether they select assets according to SEE criteria.
Belgium	Since 2004 the pensions fund, SICAV and trustee have to report at what extent the SEE criteria are taken into account in investments decisions. In 2007 and then in 2009 the Belgium Parliament forbidden the investment in companies producing respectively anti-personnel mines, submunitions and depleted uranium weapons.
Denmark	In December 2008 the Danish Parliament approved a law which obliges the largest companies, and so institutional investors, unit trusts and listed financial investors, to disclose at what extent the SEE criteria have been taking into account in the investment strategy, how they have been implemented and the results they have produced.
France	Since to 2001 French companies are constrained to report on social and environmental issues in their annual reports, and the SICAVs and investment management companies to disclose how the ESG criteria are taking into account in the investment policy. The firms are obliged to propose to their employees among the corporate saving scheme a solidarity enterprise mutual investment fund which has strong social objectives.
Germany	Since 1991, the closed- end funds have a tax advantage in investing in wind energy. The private pension schemes and the occupational pension schemes are obliged since 2002 to report annually to their members at what extent the SEE objectives are integrated in their investment policy.
Italy	In 2005 the Italian Parliament voted a law which obliges pension funds to disclose non-financial factors, particularly the SEE information, influencing their investment decisions.
Netherlands	Since 1995, the Dutch government provides tax reduction to both investors and investee, if the investment is done in green project certified by the ministry of VROM. Since 2007 a law forces the institutional investors to state about compliance with the best practices in their sector in the annual report or on their website.
Norway	Since 2004, the investment strategy of the Norwegian Government Pension Fund-Global contains

Country	SRI related initiatives
	Ethical Guidelines based on negative screening and engagement policies.
Spain	The Spanish government proposed, in 2007, a law to oblige the Spanish Pension Reserve Fund, to invest 10% of its assets in a sustainable way and so taking into account of the SEE criteria; the proposal is still pending the Parliament approval.
Sweden	Since 2000 the Swedish National Pension Fund System funds are forced to take into consideration in their investment strategies the SEE criteria, and to disclose in their annual reports at what extent they take into account.
UK	Since 2000 and the Amendment to the 1995 Pension Act, the occupational pension funds are constrained to disclose in the Statement of Investment Principles "the extent (if at all) to which social, environmental and ethical consideration are taken into account in the selection retention and realization of investment; and their policy (if any) in relation to the exercise of the right (including voting rights) attaching to investment".

This table summarizes the main SRI regulation country by country. Sources: (European Commission, 2010a; Streuer, Sharon, & Martinuzzi, 2008)

2.1.5.2. Austria

In 2001 the Austrian Ministry of Agriculture, Forestry, Environment and Water Management, in collaboration with the Austrian Society for Environment and Technology developed the website www.gruenesgeld.at ("green-money"). Targeted for the investors, private or institutional, this SRI platform for ethical-environmental investments provides an overview of the SRI industry, the different possible investments' types or products, the existing certifications and their meanings as well as a proper guidance.

In January 2008, the Austrian Ministry of Agriculture, Forestry, Environment and Water Management along with the Austrian Consumer Information Association and some experts developed the Austrian Environmental Label for green funds. In order to use this label, the funds have to disclose some specific social and environmental criteria (European Commission, 2010a).

In the Federal Act on the Establishment, Administration and Supervision of Pensionskassen, enacted in 2004, at the section 25a of the Declaration on the investment policy principles, it is stipulated that the Pensionkasse, a voluntary occupational pension fund, shall include in the mandatory investment policy principle declaration "the potential selection of assets according to ethical, environmental and/or social criteria".

2.1.5.3. Belgium

Since January 2004 and the "Vandenbroucke" law, the pension funds are required to disclose in their annual report to which degree the social environmental and ethical criteria are taken into account in the investment strategy. A similar law exists for the mutual funds and the SICAVs. They have to report in the prospectus and in the annual report, the extent to which their investment policies take social environmental and ethical criteria into consideration. The way, whose SEE criteria are used in the exercise of the shareholder rights (voting rights, resolution submission) have to be disclosed in the annual report too. Please find the extracts hereunder (in French) (Parlement Belge, 20 Juillet 2004):

Section III. — Prospectus d'offre publique de titres et documents relatifs à l'offre publique de titres

Art. 52. § 1er. Une offre publique de titres d'un organisme de placement collectif ne peut être effectuée qu'après qu'un prospectus a été rendu public. En cas d'offre publique de parts d'un organisme de placement collectif à nombre variable de parts, un prospectus simplifié doit également être rendu public.

§ 2. Le prospectus, ainsi que le prospectus simplifié, contiennent les renseignements qui sont nécessaires pour que le public puisse porter un jugement fondé sur le placement qui lui est proposé et, notamment, sur les risques inhérents à ce placement et sur les droits attachés aux titres. Le prospectus simplifié contient, sous une forme résumée, les renseignements fondamentaux sur le placement qui est proposé au public et sur les risques qui y sont inhérents. Le prospectus précise dans quelle mesure sont pris en compte les aspects sociaux, étiques et environnementaux, dans la mise en œuvre de la politique d'investissement.

Section IV. — Informations périodiques et règles comptables

Art. 76. § 1er. Tout organisme de placement collectif publie un rapport annuel par exercice et un rapport semestriel couvrant les six premiers mois de l'exercice. Ces rapports contiennent un inventaire circonstancié du patrimoine, un relevé des résultats ainsi qu'une information sur la manière dont ont été pris en considération des critères sociaux, environnementaux et éthiques dans la gestion des ressources financières ainsi que dans l'exercice des droits liés aux titres du portefeuille. Cette obligation s'applique, le cas échéant, par compartiment.

Besides, respectively in March 2007 and in June 2009 the Belgium parliament enacted two laws prohibiting for the Belgium investors the direct and indirect financing of the production, commercialization use and possession of respectively anti-personnel mines, submunitions and depleted uranium weapons (European Commission, 2010a). Finally an amendment to the law regulating economic activities and individuals with weapons is under discussion. It aims to ban the financing of companies involved in the production or commercialization of incendiary weapons with white phosphorus (Belgian Parliament, 2009).

2.1.5.4. Denmark

In 2010 came into force the "Act amending the Danish Financial Statements Act (Report on social responsibility for large businesses)" by requiring that the 1,100 largest firms describe their corporate social responsibility policies, how they have been implemented and the results they have produced. The section 99a specify that the institutional investors, unit trusts and all listed financial business have to disclose in the annual report how the corporate social responsibility (human rights, societal, environmental and climate conditions as well as anti-corruption criteria) is taking into account in their works, how it is implemented and how it is evaluated. The companies decide individually and voluntarily how, at what extent and in which area apply the CSR. The information on extra-financial criteria provided by the company in the report must be audited as well as the annual report. The enterprises signatories of the U.N. Global Compact[11] or

[11] "The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption." The Communication on Progress is a mandatory report, in which the companies have to disclose information which proves their commitment with the UN Global Compact policy and its ten principles (United Nation).

U.N. Principles for Responsible Investment[12] (UNPRI) are exempted from the obligation to publish on the corporate social responsibility in the annual report at the condition that the Communication on Progress of the current period is publicly available and is mentioned in the management's review of the annual report. This exemption provides an incentive for the companies to approve the U.N. Principles for Responsible Investment (Danish Commerce and Companies Agency, 2009).

2.1.5.5. France

The French government has proposed several laws since 2001 on the SRI related issues approved by the parliament. In February 2001 the French parliament voted a law to force the funds managing the French Employee Saving Plans to integrate in their internal rules, if need be, the social environmental and ethical criteria they must consider. Besides the fund have to disclose in its annual report at what extent the SEE factors have been taking into account. The Fonds de Réserve des Retraites (Retirement Reserve Fund FRR), which accounts for €33 billion, has to report on the policy investment guidelines and at what extent the SEE are taking into account since July 2001. In its investments policy from June 2009, the FRR has to pursue "certain shared values that promote economic, social and environmentally sustainable development" (Fonds de Réserve pour le Retraites FRR, 2008).

Since May 2001 with the legislation "Nouvelles Régulations Economiques" (New Economic Regulations) the French companies are required to report on social and environmental issues in their annual reports. The Grenelles de l'Environnement II enforced the SICAVs and investment management companies to disclose their investment policy and so how the ESG criteria are integrated in it. The law of the "Modernisation de l'Economie" (modernization of the economy) constraints the firms to propose to their employees among the corporate saving scheme a solidarity enterprise mutual investment fund which target more specifically the community investing with strong social objectives (European Commission, 2010a).

In August 2009 the parliament voted a law to stimulate the SRI approach through stimulation mechanism and informational campaign as for example the first French SRI week in 2010. In the same year the Agence

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More information on the UN Global Compact is available at: www.unglobalcompact.org.

[12] The Principles, launched in 2005 by the United Nations Secretary-General, provide a voluntary framework by which all investors can incorporate ESG issues into their decision-making and ownership practices. Please find hereunder the six principles:
1. Incorporate ESG issues into investment analysis and decision-making processes
2. Be active owners and incorporate ESG issues into ownership policies and practices
3. Seek appropriate disclosure on ESG issues by the entities in which one invests
4. Promote acceptance and implementation of the Principles within the investment industry
5. Work together to enhance the effectiveness in implementing the Principles
6. Report on activities and progress towards implementing the Principles

As of April 2011 over 850 funds have approves the UN Principles for Responsible Investment, managing more than $25 trillion (United Nation).
More information on the UN Principles for Responsible Investment is available at: www.unpri.org

Française de Développement, (French Development Agency), incorporated in its investment policy the ESG criteria into the direct financing and financing through financial intermediaries (European Commission, 2010a).

Since 2008 and the approval by the Caisse des Dépots et Consignations (French Deposit and Consignment Office CDC) of the UNPRI, this fund invests only in companies disclosing their CSR.

Finally since 2010 any direct or indirect financial assistance to the production or trading of cluster munitions is forbidden (French Parliament, 2010).

2.1.5.6. Germany

Since 1991, the closed- end funds have a tax advantage in investing in wind energy with the Renewable Energy Act. In order to encourage and stimulate the development of the SRI industry the German federal government enacted, in the beginning of the year 2002, the obligation for the private pension schemes and the occupational pension schemes to report annually to their members at what extent the SEE objectives are integrated in their investment policies (Streuer, Sharon, & Martinuzzi, 2008).

In the previous years, Germany created several initiatives in order to foster some specific branches of the SRI methodology such as the micro-finance or the environmental aspects. The micro-finance, which takes more and more a significant place in the SRI approach (€1 trillion invested in 2009 by European investors), has seen its development encouraged with the revision in April 2010 of the Investment Act, which allows the public distribution of microfinance funds. The German "Climate Change" campaign, organized on behalf the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety in 2010, focused specifically on the environmental aspects. It attracts the interest of many financial services' providers. In the same year the German government in partnership with the KfW Development Bank founded the global climate protection fund with a total asset of \$100 million and an objective of \$500 million by 2015. The onus of the fund is to help the small and medium enterprises as well as the private households to invest in energy efficiency and renewable energy in developing and emerging countries (European Commission, 2010a).

A motion submitted by the Green Party in 2010 proposed to forbid the financing of production or trading of any weapons prohibited under international convention (German Bundestag, 2010).

2.1.5.7. Italy

As several countries as France, Germany etc., Italy voted in September 2005 a law, based on the UK example, which obliges pension funds to disclose non-financial factors, particularly the SEE information, influencing their investment decisions. Following the scandal of Parmalat, the Italian parliament adopted a law in order to protect in a stronger way the small investors. One of the measures obliges the financial institutions to disclose more information, on processes and results, to investors for product labeled as "socially responsible" or "ethical". Please find hereunder an extract of the law (in Italian) (D.Lgs. 252/2005, articolo 6, comma 13, lettera c):

> Le forme pensionistiche complementari sono tenute ad esporre nel rendiconto annuale e, sinteticamente, nelle comunicazioni periodiche agli iscritti, se ed in quale misura nella gestione delle risorse e nelle linee seguite nell'esercizio dei diritti derivanti dalla titolarità dei valori in portafoglio si siano presi in considerazione aspetti sociali, etici ed ambientali.

A draft bill submitted in April 2010 and which is now under discussion, proposed to forbid the financing of companies involved in the production or trading of landmines and cluster munitions following the Belgian example (Italian Senate, 2010).

2.1.5.8. Netherlands

In 1995 the Dutch tax office in cooperation with the ministry of Housing, Spatial Planning and the Environment (VROM), the Ministry of Finance and the Ministry of Agriculture, Nature and Food Quality (LNV) introduced the Green Funds Scheme, a tax exemption mechanism. Investors in mutual investment funds, which invest at least 70% of their assets in green project certified by the ministry of VROM, are granted by the government with a tax reduction on capital gain tax. Borrowers have moreover a tax reduction on the value of the green investment. Despite the weak involvement of the population for this program, only 1.4% actually contributes to the scheme, as of 2008, 5000 projects have been financed for an amount of €6.8 billion. This mechanism was responsible for half of the growth of the SRI approach during its early stage of development. Due to the success of this program, the Dutch government created in 2004 a similar mechanism, the Social-Ethical-Fund to support entrepreneurs in developing countries. However this program knew a lower success due to more difficult assessment of the risks.

In 2002 in order to increase the awareness of investors about the SRI approach, the "Vereninging van Beleggers voor duurzame Ontwikkeling (VBDO)" and the Dutch Ministry of Environment created the "Sustainable Money Guide". This guide, published every two years, lists the Dutch financial institutions that are offering socially responsible investments. It describes also the different types of strategy (negative and positive screens, shareholder engagement) and the different possible foci of the funds.

Finally since 2007, the Financial Supervision Act forces the institutional investors to state about compliance with the best practices in their sector in their annual reports or on their websites (European Commission, 2010a).

After being adopted by the Dutch Parliament, the Senate adopted in March 2011 a motion prohibiting the investment in companies involved in the production or trading of cluster munitions.

2.1.5.9. Norway

The involvement of the Norwegian government into the promotion of the SRI approach can be traced back to the late 1980s, when it created the first country's environmental fund. In 2004, the introduction of Ethical Guidelines based on negative screening and engagement policies in the investment strategy, for the Norwegian Government Pension Fund-Global, the largest pension fund in Europe with approximately €400 billion[13], increased significantly the market size in Norway. The Council on Ethics, created in 2004, is in charge of controlling that the fund complies with the Ethical Guidelines. If violations of the Ethical Guidelines are brought to the attention of the Council, it has three options: 1) do nothing; 2) recommend the Ministry to put the company under observation (engagement, observation of how the things evolve); 3) recommend the Ministry of Finance to exclude the company from the investment portfolio (Council on Ethics, 2011).

Due to the pressure of the Norwegian NGO community, in the early 2000s, the asset managers and institutional investors agreed to apply a minimum ethical standard to all of their assets and products.

In 2008, the Sustainable Value Creation initiative was launched by the largest Norwegian institutional investors and joined in 2009 by the Swedish ones. It aims "to influence companies listed on the stock exchange to develop sustainably while at the same time create long-term value for their owners" (Sustainable Value Creation, 2009; European Commission, 2010a).

2.1.5.10. Spain

The Spanish government proposed, in 2007, a law to oblige the "Fondo de Reserva de la Seguridada Social", the Spanish Pension Reserve Fund, to invest 10% of its assets in a sustainable way and so to take into account the SEE criteria. This law is still pending approval by the Spanish parliament. The fund was worth at the end of 2010 of €64 billion[14]. The Working Group on Socially Responsible Investment of the State Council on Corporate Social Responsibility published in the end of the year 2010 a draft of report on the SRI related issues with the aims to regulate this topic (Streuer, Sharon, & Martinuzzi, 2008; European Commission, 2010a).

2.1.5.11. Sweden

The Swedish government forced, in 2000, the Swedish National Pension Fund System, which accounts nowadays six funds, to take into consideration in their investment strategies the social, environmental, and ethical criteria, and to disclose in their annual reports at what extent they take them into account. Since

[13] Figures from the March 2011 Balance Sheet of the fund (Norges Bank, 2011), use of the exchange rate of the 26th April 2011 Norwegian Kron - Euros

[14] Figure from the December 2010 Balance Sheet of the fund available at http://www.seg-social.es/prdi00/groups/public/documents/binario/146674.pdf

2007, the funds AP-1, AP-2, AP-3 and AP-4 collaborate, about their engagements toward the companies, through the Ethical Council. It aims to engage an effective dialogue and to influence the companies in which they invest about their social, environmental and ethical impacts (Streuer, Sharon, & Martinuzzi, 2008).

2.1.5.12. UK

The United Kingdom was the first country to adopt legislation toward the SRI approach. Even overtook by France in term of total SRI assets in 2010, UK remains the leader in Europe concerning the SRI. The British Parliament approved, on July 2000, the Amendment to the 1995 Pension Act. It required, according to paragraph 2 (4), the occupational pension funds to disclose in the Statement of Investment Principles “the extent (if at all) to which social, environmental and ethical consideration are taken into account in the selection retention and realization of investment; and their policy (if any) in relation to the exercise of the rights (including voting rights) attaching to investment”[15]. This regulation, which is considered to be the major driver for the growth of SRI in the UK, conducted the pension funds to ask more accurate information to the companies, in which they have invested, about the SEE criteria (Streuer, Sharon, & Martinuzzi, 2008).

The UK is one of the several countries (107) signatories of the Dublin Convention on Cluster Munitions in 2008. The Convention, which became law when it entered into a force in 2010, forbids the production, use and repair of anti-personnel mines and submunitions (United Kingdom Foreign and Commonwealth Office, 2010).

In 2001 the Association of British Insurers, which manages currently investments of £1.5 trillion, published a disclosure guideline, advocating listed companies, and companies in which the Association invested, to report on the social environmental and ethical risks relevant for their business operations.

The new Energy Bill in 2010 lead to the creation of the Green Investment Bank, which aims to support the low-carbon project (low CO2 emission or low-carbon energy production). It will account for £2 billion of assets and half will come from private investment.

The UK Sustainable Investment and Finance developed with the support of the British Department of Environment, Food and Rural Affairs a free online training course on “Green and Ethical Investment”. This course was designed for the financial advisers, after a test for which they receive a certificate they can have access to further information about green and ethical investment (European Commission, 2010a).

[15] The law is available at: http://www.opsi.gov.uk/si/si1999/19991849.htm

2.1.6. SRI screens of the national pension fund

The regulation has forced the pension fund to disclose in most of the European countries at what extent the SEE criteria are taking into consideration in the investment policy of the fund. As proof of their will to foster the SRI fund industry they have forced the national pension funds or the national reserve pension fund to invest at least part of the assets under management in a social responsible way. This integration of SEE consideration into the investment policy has been mainly done through the use of shareholder activism strategy and in a least measure through the use of screening criteria. The Nordic countries, Norway, Sweden Denmark, are the mostly involved in this path.

Table 3: Screens of the national pension funds

Country	SRI screens
Belgium	The “Fond de vieillissement”, a Retirement Reserve Fund has no SRI related policy; it invests the totality of its assets in Belgium bonds. Nevertheless the pension funds are forbidden to invest in companies producing anti-personnel mines, submunitions and depleted uranium weapons.
Denmark	The ATP Group is the management company responsible for the operation and development of ATP Livslang Pension and Supplerende Pension the largest Danish schemes which are under statutory regulation. ATP avoids investing in companies which deliberately and repeatedly violate the national regulation where the company operates or international convention ratified by Denmark. Nor does ATP purchase equities in companies located in countries being subjected to a trade embargo imposed by the UN or the EU and endorsed by Denmark. ATP signed in 2006 the UN Principle for Responsible Investment. ATP Group engages a dialogue with a company on the ESG issues if it has violated ATP’s social responsible policy. If ATP has a minor share in this company and that this one is not perceived as strategic, ATP can decide to sell the share without engaging a dialogue with incriminated company. The dialogue phase aims to resolve or improve substantially upon the point of criticism. In the case this process wouldn’t provide satisfactory results, ATP may exclude the company from its investment portfolio. The ATP Group raises a particular focus on the environmental issue seeking to invest in alternative energy (solar, wind and Hydro energy as well as biomass and biofuels), and energy efficiency project. ATP invests also in forestry whose a good management has a positive impact on the environment. The ATP seeks also to optimize the energy efficiency of its real estate portfolio by promoting high environmental quality standard as well as by renovating some properties. The ATP Group supports the Carbon Disclosure Project (CDP)[16]. (ATP Group, 2010; 2009)
France	The Fonds de Réserve pour les Retraites (FRR) is a signatory of the UN Principles for Responsible Investment[17] since 2006. The investment strategy of the fund concerning the ESG issues lay on the ten principles of the UN’s Global Compact[18] which encompass the basic standards recognized by the International Labor Organization.

[16] CDP is a cooperative international project to increase companies’ awareness of climate change. Through the project institutional investors are pressing companies to report in a more transparent manner on their strategies for climate issues and to be better at documenting key indicators that can demonstrate improvements. The CDP is intended to increase the efficiency of the data collection process by a large number of investors collectively signing a joint request for data and reports on emissions of greenhouse gases.

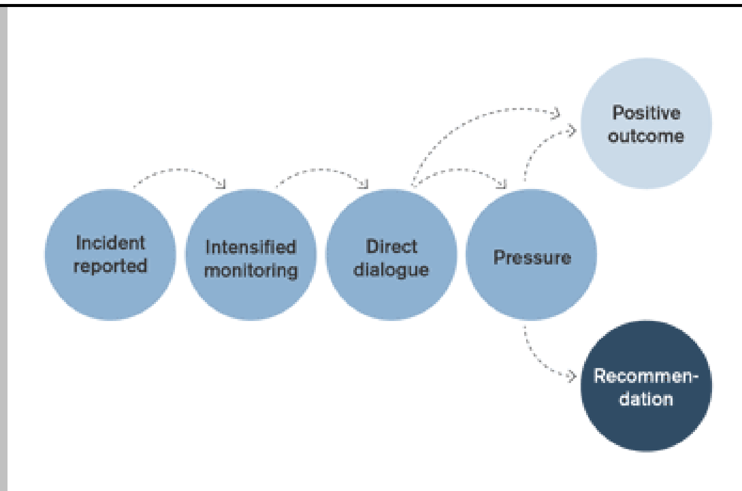
[17] See note 10.

Country	SRI screens
	The FRR apply on €600 million of assets five more constraining principles: - Respect and promote the Human Rights and the fundamental Labor Rights: ➢ Practice zero tolerance of human rights violation. ➢ Freedom of association and recognition to the rights of collective bargaining. ➢ Elimination of forced labor and all form of slavery. ➢ Elimination of child labor. ➢ Elimination of discrimination in employment and career. ➢ Comply with all international covenants pertaining to the design, development, manufacture, storage, use, transfer and the destruction of chemical and bacteriological weapons and anti-personal land mines. - Develop employment by improving the quality of human resource management ➢ Promote human resource management policy that favors disclosure, dialogue and the active participation of employees in their workplace and business. ➢ Define and conduct of long term oriented human resource management policy In particular favor negotiation and consultation with personnel representatives and actively promote employment and the durable involvement of employees in the workplace and the business (i.e. continuing education opportunities for employees throughout their career; profit-sharing programs for employees). ➢ Implement policies and procedures aimed at obtaining ongoing improvements in working conditions, in particular those that relate to worker health and safety, both physical and mental. - Assume responsibility for the environment: ➢ Factor the environment into the business strategy. In particular, apply the principle of precaution and work to prevent environmental pollution and biodiversity impairment. ➢ Strive to develop the eco-efficiency of manufacturing processes as well as products, making efforts to promote and develop environmentally friendly technologies and the use of renewable energy. ➢ Takes steps to reduce CO2 and other greenhouse gas emissions, as well as the volume and toxicity levels of waste products and water consumption. ➢ Develop and enforce high environmental quality and energy standards for the company's own plant, property and equipment (production facilities, offices and real estate assets). ➢ Factor in the environmental impact of the means of transportation used by the company, both internally and externally. ➢ Develop a policy of full disclosure on the health and safety impacts on employees, local residents and clients of manufacturing processes and products. ➢ Assume financial liability for accidental pollution related to the company's business. - Respect the consumer and fair trade practices : ➢ Promote product safety and quality. Practice full disclosure with clients, as measured by the laws in force locally and best industry practice. ➢ Refrain from behaviors that interfere with or prevent the market from functioning correctly, as well as from engaging in behaviors or practices that prevent the exercise of fair trade and competition. ➢ Promote initiatives aimed at establishing cooperative relationships with suppliers, subcontractors and co-contractors. ➢ Make available the tools and systems needed to prevent attempted corruption, racketeering, money-laundering and other business crimes. - Promote good corporate governance ➢ Corporate organization and draft resolutions submitted to the approval of shareholders should comply with the guidelines pertaining to voting proxies

[18] See note 9 for information. The ten principles are available at http://www.fondsdereserve.fr/spip.php?article184 (on the web site of the FRR) as well as on the UN Global Compact web site www.unglobalcompact.org

Country	SRI screens
	developed by the FRR. (Fonds de Rèserves pour les Retraites, 2006)
Netherlands	The Dutch national law prohibits any investments in companies involved in the production of land mines, cluster bombs, or chemical or biological weapons.
Norway	Are excluded from the fund investment universe of the Government Pension Fund Global, firms which: - produce weapons that violate fundamental humanitarian principles through their normal use - produce tobacco - sell weapons or military material to states mentioned in the guidelines for the management of the Fund Upon advice from the Council on Ethic the Ministry of Finance can decide of the exclusion from the investment universe of the fund firms responsible for or risking in an unacceptable way to contribute to: - serious or systematic human rights violations, such as murder, torture, deprivation of liberty, forced labor, the worst forms of child labor and other child exploitation - serious violations of the rights of individuals in situations of war or conflict - severe environmental damage - gross corruption - other particularly serious violations of fundamental ethical norms The Government Pension Fund Global is besides a signatory of the UN Principles for Responsible Investment. (Council on Ethics, 2005)
Spain	Since the law which would force the “Fondo de Rserva della Seguridad Social” to invest 10% of its asset in a sustainable has not been yet approved by the Spanish parliament, there is for instance no screen for this fund.
Sweden	The different funds of the Swedish National Pension Fund System are signatories of the UN Principles of Responsible Investment. Besides their investment strategies rely on the UN Global Compact and the OECD Guidelines for Multinational Enterprises[19]. The funds AP1, 2, 3 and 4 which created in 2006 a joint Ethical Council, do not believe in the blacklisting but rather argue the force of the dialogue to change poor practices of companies. The Ethical Council enters in a proactive dialogue with companies present in the AP1, 2, 3 or 4 and reported for violation of international conventions (in particular, the United Nations Declaration on Human Rights, the United Nations Convention on the Rights of the Child, the Rio Declaration on Environment and Development, the International Labor Organization’s ‘Core Conventions’ and the conventions against bribery and corruption on which the Global Compact and OECD’s Guidelines are based). If the dialogue is unsuccessful and that the company refuses to change its behavior and/or implement systems precluding future violation breaches, the Ethical Council can recommend to each of the four funds to exclude the company from their investment universe. **Figure 4: Dialogue process**

[19] The guidelines are joint recommendations to business from 40 governments, including Sweden's and cover human rights, corruption, employment, competition, taxation and disclosure

Country	SRI screens
	 Nevertheless, the funds exclude from their investment universe companies involved in are involved in developing and producing nuclear weapons, or cluster weapons. The funds support the Carbon Disclosure Project as well as the Extractive Industries Transparency Initiative[20] (EITI). The fund AP6 is currently reorganizing the way it is controlled. An issue of this reorganization is to build a comprehensive approach concerning the ESG issues. AP7 fund exclude from its investment universe companies[21]: - which are involved in developing and producing nuclear weapons, or cluster weapons - which do not abide by international conventions signed by Sweden in human rights, environmental and labor protection and related areas Moreover the fund will exclude companies from its investment portfolio for five years if: - a court has issued a judgment against it - a public body monitoring an international convention publishes documentation identifying the company for treaty violations - the company's management admits criminal activity, or - the fund argue exclusion is the right course of action

2.2. The mutual fund governance

The following section provides a review of the literature on the mutual fund governance in order to understand in a comprehensive way: the reasons why effective fund governance is required, its impact on the fund performance and fund attractiveness.

[20] EITI is an initiative for transparency in the extractive industries, especially oil companies. It argues to countries and companies with extractive operations that shareholders value clear and transparent reporting of revenue. The need for transparency and governance is particularly great in countries with rich natural resources but weak governments. Clearer reporting of revenue in host countries and reports on payments made by the companies increase transparency in society and contribute to better conditions for financial control.

[21] For more information about the Swedish Pension Fund System see: www.ap1.se, www.ap2.se, www.ap3.se, www.ap4.se, www.ap7.se, www.apfond6.se.

2.2.1. The mutual fund governance, what does it mean?

2.2.1.1. Origin and definition of mutual fund governance

Gillan (2006) defines the corporate governance in a broad perspective as a set of laws, rules and factors in order to control the operations of the company. The main actors involved are the shareholders, the management, and the board of directors; notwithstanding several external stakeholders are implicated in the corporate governance too. The mutual fund governance is similar to the corporate governance in the sense it aims to control the management of the fund (in particular the fund manager), and the investment advisors due to the several conflicts of interest it may exist with the fund. In other word it has as onus to protect the interests of the shareholders/investors. Nevertheless the focus of the oversight and competences required are quite different from those needed for a public company.

The need to create fund governance arises from the separation between control of investment decisions as well as fund management and ownership of the assets. Jensen and Meckling (1976) explained through the agency theory how the modern corporation could survive given that the mangers do not bear the full risk of their decisions and that they have their own interest which could differ from the one of the company. In order to prevent from important divergences between the views of the principal and those of the agent, a control is required. In its paper “The firm theory: managerial behavior, agency costs and ownership structures”, Jensen (1976) distinguishes two types of activity to control the decisions of the agent: expenditures’ monitoring and bonding activities. Fama and Jensen (1983) explained that due to the diffused ownership structure of the fund, the most efficient way to control the “agent”, the management company and in particular the fund manager and the investment advisors, is to separate the risk bearing from the decision control even if it arises some agency problems. They identify two specific ways to monitor the fund management:

- The redemption of the shares: this is a diffused control which is exercised by the shareholders. It deprives the managers of the control on the assets and so can be perceived by them as “a partial liquidation or takeover” (Fama & Jensen, 1983). The repricing of the securities on the capital market provides signal about the performance of the agent’s decisions[22].
- The board of directors: oversees what the redemption cannot, in particular the frauds, the outrights … It focuses also on the possible conflicts of interest including matters of compliance, risks, fees, and the other costs for running a fund. It can be subdivided into two groups. On the first hand there is the “family governance”, governance exercised by the management company

[22] New shares of the mutual open-end fund are continuously offered to the public, the investment company is obliged by law to redeem fund outstanding shares at any time upon request of the shareholders.

through the different incentives and threats and the inside[23] directors. On the other hand the other layer of governance is embodied in the outside or independent directors. However, the power of the board of directors is less important in Europe than in US due to some other mechanisms of control specific to each country.

The European Commission defines the role of the board of directors in the directive 2009/65/EC (European Commission, 2009), and in the different directives aiming to its implementation: 2010/42/EU, 2010/43/EU (European Commission, 2010b; European Commission, 2010c). The role of the board of directors or supervisory board, depending on the legal form of the management company, can be summarized as following:

- Oversight of the service providers (prime broker, distributor, investment advisor…)
- Oversight of the management company (to secure compliance with decisions and procedures)
- Oversight the effective flow and quality of the financial information provided to any third party involved as well as supervisory authorities and shareholders
- Approve investment strategies
- Control on a periodic basis that the general investment policy, the investment strategies and the risk limits of each managed fund are properly and effectively implemented and complied with
- Approve and review on a periodic basis the risk management policy, arrangement and procedures to implement it
- Monitor the different conflicts of interests in order to protect the interest of the shareholder
- Select fund independent public accountant and set accounting fees
- Select the depositary

Contrary to the US regulation, the European directive does not force management companies to have a required proportion of independent directors.

2.2.1.2. The main mutual fund governance proxy and its impact on the fund performance and attractiveness

Several studies (Bhagat & Bolton, 2008; Gompers, Ishii, & Metrick, 2003; Renders, Gaeremynck, & Sercu, 2010) on corporate governance have shown a positive link between the governance quality of a company and its performance. These studies do not simply show that the corporate governance reflects the company performance but also they prove it affects it. Indeed better monitoring to control the agency problem, forces companies to invest in positive net present value projects and to reduce perks and waste in

[23] Directors which have material interests in the management company.

a word to decrease suboptimal behaviors, so to increase the benefit flow to investors (Schleifer & Vishny, 1997). Doing a parallel between the public companies and the mutual fund industry, we could expect that as the corporate performance impacts the company performance, the fund governance impacts the fund performance too.

The literature is quite prolific concerning the relationship between the fund governance, mainly through the structure and composition of the board, and the fees charged by the funds to the investors (Tufano & Sevick, 1997; Del Guercio, Dann, & Partch, 2003; Ding & Wermers, 2009). Indeed they show that the expenses ratio is a measure of the board effectiveness, a key element of the fund governance. Lower fees are associated with smaller board size, higher proportion of independent directors and unitary board[24]. High compensation of the board of directors is positively related with higher fees and so gives evidence of ineffective board (Del Guercio, Dann, & Partch, 2003; Tufano & Sevick, 1997).

The issue of the relationship between board composition and structure, and the fund performance is one of the most popular topics of research among the fund governance studies. They consider, as far as I know, exclusively US mutual funds samples, where the power of the board is much more important than in Europe since the board is responsible for the selection of the management company, and can thus fire it. Del Guercio, Dann and Partch (2003) points out examining the board's composition and compensation that good fund governance is associated with value-enhancing restructurings. Ding and Wermers (2009) argue that the increase of fund expenses due to an additional independent director is smaller than its positive impact on pre-expenses performance as long as the proportion of independent directors does not overtake 75%. Indeed the inside directors have a better knowledge of the management company operations and are able to monitor effectively performance-reducing hidden actions[25] of the portfolio manager. In the same paper the authors claim that mutual fund boards with more independent directors are more likely to replace poor performing fund managers, and notice in the following years a better performance when significant outflows occurred prior the replacement of the managers.

Wellman and Zhou (2007) argue that fund governance plays a significant role in fund performance. Their results shed light on the positive correlation of the fund governance with the fund performance, the quality of the board of directors and the fund fees being the most significant factors to explain the fund performance. Moreover they show that the investors are sensitive to the fund governance and make trading decision based on it: they pull money out of poorly governed fund in order to invest in fund with effective governance. Chou, Ng and Wang (2007) give evidences that funds with better governance,

[24] A unitary board oversees all the funds of a same family of fund.

[25] Hidden actions are those that potentially affect fund performance, but are not observable using periodic portfolio holdings reports such as interim trading.

measured by the Morningstar stewardship grade, tend to have better performance and have larger total net asset value (showing the greater ability of well governed fund to attract assets). Qian (2006) study specifically the market monitoring of the fund done by the investors by withdrawing assets from or adding assets to the fund and show it can be considered as an effective governance mechanism. In fact, the study argues that mutual funds with higher flow sensitivity have lower trading scandals.

2.2.2. The particular aspect of the of the SRI mutual fund governance

In the following section, three particular aspects of the SRI fund governance will be considered: the transparency, the engagement and the outsourcing of the extra financial screening.

2.2.2.1. Transparence

Haely and Palepu (2001) in their paper "Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature" claim that the voluntary information disclosure is a solution to the lemon problem also called information problem and to the agency problem. In particular, they argue that managers who anticipate making capital market transactions, have incentives to voluntary provide information in order to reduce information asymmetry problem and so reduce the cost of external financing, the cost of capital. The voluntary disclosure of information allows the investors to decrease the information risk they bear and so to increase the investors' attractiveness for the transaction. Nevertheless the study points also out strong incentives for the managers to not disclose information that will reduce their competitive positions and performance.

Prat (2005) distinguishes two kinds of information. He proves that transparency related to the consequences of the agents' actions has a beneficial impact on the principal, while information directly about the action can be detrimental to him. Indeed the agent may disregard some useful private information in order to act "according to how an able agent is expected to act a priori". The agent action may be less aligned with the principal interest and it does not allow assessing the ability of the agent. The transparency topic is particularly a hot issue in the mutual fund industry where real time information could harm a fund due to the anticipation or mimicking of its investment strategy. Several Australian and New Zealander fund managers (Haigh & Guthrie, 2010) express their disfavor about the disclosure of how the ESG factors are considered into the portfolio construction. However they support the disclosure of the stock portfolio, they judge useful. It corresponds to the outcomes of the stock picking process, and allow to the investors to monitor that the selected stocks comply with the investment policy.

Ge and Zheng (2006) argue that funds with higher stock turnover, higher expenses ratio, higher likelihood to commit a fraud disclose their portfolio less frequently. They show a different impact of the disclosure frequency on the fund performance whether the agency effect (positive correlation) predominates or on the contrary whether the information effect overtakes (negative correlation). Finally they allege a positive relation between the flow of new money in the fund and the frequency of disclosure of the fund.

2.2.2.2. Shareholder Activism

The shareholder activism can be subdivided into five approaches according to Sullivan and Mckenzie (2006):

- Use of voting and other formal shareholder rights
- Engagement or collaboration
- Public benchmarking
- Media communication
- Influence of the share price

The use of voting rights and other formal shareholder rights concerns mostly the corporate governance issues than the SEE ones since there are few opportunities to exercise them on the SEE factors. The institutional investors use in some cases their voting rights as a signal toward the management on the corporate responsibility by voting against management. Indeed filling special resolutions is difficult due to the strict conditions the investors must satisfy; it risks furthermore compromising the dialogue with the company (Mackenzie & Sullivan, 2006). Notwithstanding the number of shareholder resolutions on ESG issues raised in 2010 in the US, and it is not rare they get the support of more than 30% of the share voted, particularly those addressing climate change and environmental risks, reporting on sustainability and ensuring fair employment practices (Social Investment Forum (SIF), 2010). The SIF underlines a pronounced increasing trend concerning the vote support on environmental and social issues. In the United Kingdom, the Institutional Shareholder Committee which represents more than 80% of the British institutional investors includes, since 2002, the assessment of the company's societal approach in its policy statement (Wen, 2009). The benchmarking approach has begun to be used as a support of the engagement or dialogue methodology. Insight Investment, one the largest UK asset management company with more than £118 billion asset under management, benchmarks all the stocks of its portfolio using ESG criteria. A famous example of public benchmark is the FTSE4Good index which allows stimulating companies to improve their ESG performance. The institutional investors act more and more collectively. They present a consistent a unique voice on the corporate responsibility issues through for example the Institutional Investors' Group on Climate Change, the Pharmaceutical Shareowner Group, the Carbon Disclosure Project or the Ethical Council in Norway. However the shareholder activism tends to be limited to the large companies while its impact could be more significant and successful in the small and medium companies. But these previous ones represent only a small part the fund portfolio, what could explain their lack of interest (Juravle & Lewis, 2008).

In order to assess the impact of the shareholder activism approach, two components must be taken into account: does it improve the ESG performance of the company? And does this ESG improvement increase the firm's earnings and thus its share price.

The academic literature argues that the shareholder activism, and particularly the engagement, enhances the ESG performance of the company (Mackenzie & Sullivan, 2006; Becht, Franks, Mayer, & Rossi, 2006; Wen, 2009). Mackenzie and Sullivan (2006) allege the shareholder activism succeeded to increase the board independence, to establish long term incentives structure for the managers, to improve the risk assessment structure and the quality of the company policy as well as to disclose on SEE issues (such as climate change, corruption, human rights, labor standards…). The example of GSK which has decreased the prices of its HIV/AIDS medicines in Africa due to the engagement of institutional investors and NGOs or the mining industry in South Africa which provides to its workers the HIV/AIDS antiretroviral therapy, are relevant examples of the beneficial impacts of the engagement.

The financial impact of shareholder activism is more ambiguous. Although the theory would forecast a positive financial return on the long term, through the stock price change of the investee companies, due to the beneficial effect of the implementation of the ESG factors, - the preservation of the reputation of the company by avoiding significant environmental and social risks, the increase of customer loyalty, the positive impact on the motivation of the company's employees -, the empirical studies have produced conflicting studies (Wen, 2009). On the one hand, several publications give evidence that the shareholder activism enhances the shareholder value mainly on the long term but also in a least measure on the short term (Godfrey, 2004). The example of Hermes UK Focus Fund, a case study developed by Becht, Franks and al. (2006), tends to support a beneficial impact. The authors claim the fund knew over the 1998-2004 period a 4.9% abnormal return net of fees a year, against the FTSE all share index, due at 90% to the activism. The Californian Public Employees' Retirement System's case provides also evidence of a positive excess return due to the activism. The fund invests in companies which know an erosion of their stocks, stops it through its engagement and succeed even to generate positive return. The academic literature refers to this effect as the "CalPERS effect". Moreover Clark and Hebb (2005) show that institutional investors are paying more and more attention to corporate reputation since it can have a significant impact on the fund performance through the share price change of investee companies. Following the oil spill in 2010 in the gulf of Mexico BP knew a significant decrease of its share price as well as Nike suffered from the sweat shop reputation.

In contrast conflicting evidence has been presented concerning the effect of SRI. Margolis and Walsh (2003) allege SRI strategy has limited effects. Renneboog (2008b) conducted a meta-analysis and did not find that the SRI funds underperformed nor outperformed their conventional counterparts. Similarly, he does not find evidence of a positive nor negative impact of the shareholder activism. Therefore the inclusion of SEE criteria in the investment strategy does not appear at least as a performance penalty.

The difficulty to assess clearly the impact of the shareholder activism could partly explain the conflicting results according to Wen (2009). Indeed most of the funds and or management companies exercise their engagement behind closed doors rather than through the formal shareholder rights (Mackenzie & Sullivan, 2006; Becht, Franks, Mayer, & Rossi, 2006). Wen (2009) reports they reached a negotiated settlement in the most of the case before to submit a shareholder proposal for a vote during the annual general meeting. The behind scene negotiations allows avoiding the use of the public shareholder rights which may be damaging both for the investee company and for the dialogue between the company's managers and the fund. In addition, it is difficult to assess whether the observed corporate responsibility and corporate governance changes are the result of shareholder activism or whether it is due to other economical or political factors.

Finally the opportunistic behavior of some institutional investors, which act as free-riders, reduces the financial outcomes for the institutional activists. The active owner would have to bear all the monitoring costs and risks while all the shareholders could reap the benefits of the monitoring. This problem fosters the growth of collaborative behaviors among the institutional shareholders (Becht, Franks, Mayer, & Rossi, 2006; Wen, 2009; Mackenzie & Sullivan, 2006).

2.2.2.3. SRI externalities

Fund families tend to enlarge the range of products they propose to their clients, funds with various fee structures and various styles (among them SRI one), in order to keep the clients in the fund family with a strategy of the one stop services (Massa, 2003). Indeed by enlarging the family size the management company increases its earnings through the fees paid by the investors. However due to the large number of styles, build in house all the capabilities and competencies may be prohibitively costly, and ineffective. Therefore outsourcing these activities may appear as solution which allows enlarging the offer of the fund family in maximizing its profit (the fund family perceives the marketing fee, while the external management company in charge of the fund perceives the management fee).

Holmstorm (1999), based on the main theories of the firm, argues that contractual externalities due to firm boundaries, make it more difficult to extract output from an outsourced relationships than from an employee within the firm. Moreover the firm wants, in a multi-task principal-agent setting, to use lower powered incentives to get output from an employee, while it has to count on high powered incentives in an outsourcing relationship. Indeed the two firms cannot coordinate their incentives in this last case.

The relation, between the management company and the company in charge of the SRI research and or stocks' screening, fits perfectly within this framework. The parties cannot coordinate their incentives and tasks assignment. The management company may not know which manager or team is assigned to the work, nor which are their other responsibilities or tasks, nor how many time and resources are dedicated to, nor if it is sufficient…. The management company is forced to trust its provider. The firm, when the activity is internalized, has much more levers to motivate its employees, and can control them much more easily. Indeed the management company has access not only to the past performance of its employee but also to a large number of other information. Furthermore the funds which employ their own SRI researcher team may get during the screening process relevant information which is not displayed in the output provided in the case of the outsourced team. Thus the funds whose SRI research and screening is outsourced would underperform those whose this activity is internalized.

Renneboog et al (2008b) find that funds which have an in-house SRI research team to screen the portfolio perform better than those without. The SRI in house team produce thus a valuable information for the firm Chen et al. (2006) find evidence that outsourced fund underperformed in-house ones by 43,2 basis points a year. They show that the underperformance is due to the outsourcing relationship. They claim the outsourced funds face higher powered incentives (a highest probability following a poor past performance period of fund closure or management termination, as well as deviation of fund risk taking from its style average), and allege that outsourced funds deviate less from their style average risk profile than their counterparts run internally due to the higher discipline.

2.3. A set of testable hypothesis

In the following section I will sum up briefly the different proposition and related testable hypotheses that I have roughly outlines in the previous parts.

The first proposition is about the relationship between the specific characteristics of the SRI fund governance we have previously discussed and the performance of the fund. Prat (2005) shows that the disclosure of the agent actions could harm the principal. Thus the disclosure of sources and methods used to assess the sustainability of a company could harm the performance of the fund and so worst off the shareholders. This theory can be also related to Healy and Palepu (2001) which argue that managers have strong incentives to not disclose information which would reduce their competitive position. Since in the mutual fund industry the information is the feed of the fund manager, information disclosure about screening methods may likely allow other funds to mimic or anticipate the investment strategy of the fund and so harm it.

H1: The disclosure of SRI screening sources and methods has a negative impact on the performance of the fund.

Though the empirical literature is quite ambiguous about the positive financial impact of the SRI shareholder activism, the several limitations to the study of the shareholder activism, behind scene discussion and free rider behaviors, may explain the conflicting results obtain on the topic. The theory would forecast than due to the positive impact on the companies' reputation, on the customer loyalty and on the employee motivation but also through the reduction of environmental, social but also ethical (as it was the case for Nike and its "sweat shops") risks, will increase the earnings of the companies and hence have a positive effect on their stocks' prices change.

H2: SRI funds engaged in shareholder activism earn higher risk adjusted performance than those which do not

The SRI research is likely to provide valuable information for investment portfolio such as about the SEE risks which could harm financially the companies and so impact negatively their stocks prices due both to legal indictment and to loss of reputation. The funds outsourcing the SRI research activity are expected to underperform those that employ an in-house SRI researcher team.

H3: SRI funds performing internally ESG analysis have higher risk adjusted performance than those with external ESG analysis.

Finally since the investors are sensitive to the fund governance quality and invest partly in function of it, and that the transparency of a fund toward its investors is a component of the fund governance, we expect that higher disclosure, which solves partly the information asymmetry problem, would attract more investors' assets.

H4: SRI funds with strong disclosure will attract more investors' assets than funds with weak disclosure.

3. Data and Methodology

In this section, I introduce the sample I used for the study, detail its construction and highlight some of its characteristic.

3.1. The sample and its construction

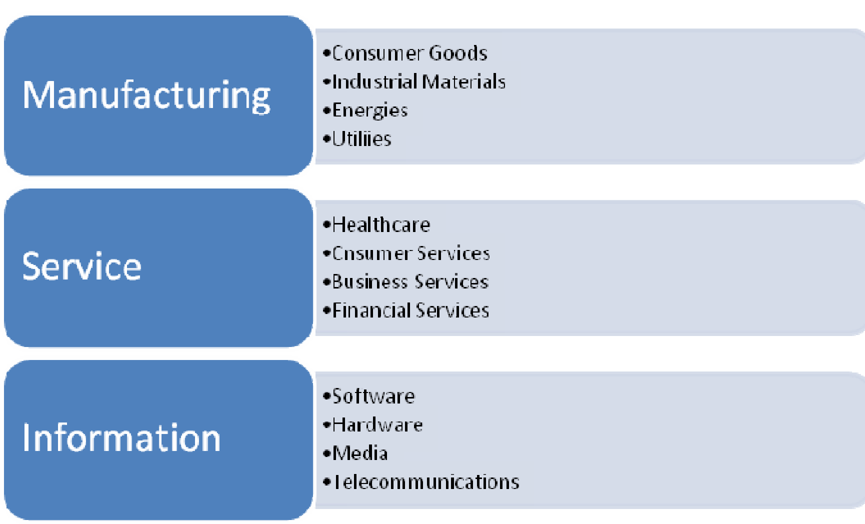
The database has been built in collaboration with Rodrigo Soares Takasaki and Daniela Laurel. We used two main sources, Morningstar for the financial data as well as fund characteristic information, while we used a database built by Vigeo, former Avanzi, concerning the SRI characteristic.

3.1.1. Financial information

We built using the freely available information on the Morningstar website, a database of 531 funds for which Vigeo has built its own database concerning the SRI information. This database contains information about the fund management, its portfolio, its fees structure, and its monthly performance as well as monthly fund size since 1984.

We have collected information about the domicile of the fund, its legal structure, the fund age as well as the number of years' experience of the current fund manager. Morningstar identifies nine different possible styles for a given mutual fund based on the type of stocks it owns: Small Value, Small Blend, Small Growth, Medium Value, Medium Blend, Medium Growth, Large Value, Large Blend, and Large Growth. We have gathered for each fund its investment style assessed by Morningstar. We have also collected information on the geographical split of the funds' portfolio as follow: North America, Latin America, UK, Europe (ex UK), Middle East-Africa, Japan, and Asia-Pacific (ex Japan). For each fund we have reported the percentage of the portfolio invested in each sector defined by Morningstar: Manufacturing, Service or Information as well as in their components split as follow:

Figure 5: Split of the three sectors



We used on the same way the data provided by Morningstar to split the portfolio in function of the type of financial securities invested in: stocks, bonds, money markets and others. Finally we gathered the fee structure applied by each fund and in particular the initial and exit load, the switching fee, the management fee as well as the total expense ratio.

3.1.2. SRI information

We have got from Avanzi SRI Research database the different screening criteria used by the funds. We classified them into four categories:

- Environmental factors
- Social factors
- Corporate governance factors
- Controversial Business Involvement

Lastly we have collected information about the corporate governance of the fund. Avanzi SRI Research details it into twenty one criteria which can be clustered in three main groups:

- The transparency
    - Fund informs clients about voting actions occurred in relation to SRI matters
    - Fund provides information about changes in its portfolio, explaining why companies have been admitted/excluded
    - Fund discloses sources and methods used to acquire information about the degree of sustainability
    - Fund provides clients with details of SRI criteria used to select its portfolio
    - Fund informs clients about changes in SRI criteria
    - Fund provides information about eventual engagement activities related to SRI matters
    - Fund discloses the amount of donations and percentage of management fees given to charities
    - Fund discloses its voting practices and reasoning for decisions
- The shareholder activism
    - Companies are regularly informed about the fund's decisions
    - Ethical/Socio-environmental profiles sent to screened companies
    - Fund manager/analysts include Corporate Social Responsibility (CSR) issues in routine meetings
    - Fund manager has written to companies about issues of concerns during the last 12 months
    - Fund manager has arranged special meetings with companies during the last 12 months
    - Fund manager released press briefings and statements during the last 12 months
    - Fund manager proposed CSR related resolution during the last 12 months

- Fund manager monitors the effectiveness of his/her engagement activity
- Fund systematically attends shareholders' meetings
- Fund has a voting policy
- Fund joins other investors initiatives regarding ESG issues
- Fund sponsors / co-sponsors shareholder resolutions

- The SRI Specialization
  - Fund manager fully performs environmental and social analysis

3.1.3. Sample construction

The database counts 531 funds with their related financial and extra financial criteria. However a large number of funds are reported as applying no social responsible criteria mainly due to missing data. Therefore I took out of the sample, these funds in order to be consistent with the SRI definition I have retained. I proceed on the same way concerning the funds whose all fund governance related data were missing. After having cleaned the database from SRI outliers, I took out the funds focused on the money market as well as those whose portfolio is invested at more than 85% outside United Kingdom and Europe. At the end of this cleaning phase 102 SRI funds are remaining. As far as we know, no domestic SRI fund ceased operations during the sample period, so we do not have to correct for survivor bias in the data. I have restricted the period of interest from 2006 to 2010, which includes the recent financial crisis. Thus the panel contains 6,120 observations.

3.2. Data analysis

The characteristics of the 102 SRI mutual funds included in our analysis (as of March 2011) are presented in Table 4 Panel A. In our sample age varies from 3 years (by construction) and 31 years and a mean of 13 years and 4 months while assets ranged from €3 million until €1,531 million. Our sample is similar to those of Barnett and Salomon (2006) and Rennenboog (2008b), they had respectively an average fund age of 5.7 and 5.9, and an average fund size respectively of $93 million and €64 million. The slight differences observed can be explained due to the higher maturity of the industry over the period I considered. Indeed in these previous publications, the authors stopped the study period to 2003, while the SRI mutual fund industry has known in the last decades a period of strong growth. Finally the management fee ranged from 0.5% to 2.5%.

Panel B of Table 4 reports summary statistics about the average composition of the investment portfolio of the sample. The SRI funds considered tend to have a strong focus on the Europe including the United Kingdom, on average 71% of the securities the funds own are European with a standard deviation of 27%. 59 funds out the 102 that count the sample have a share of their investment done in European securities, including the British ones, superior to 60%. The weight of the UK in the investment portfolio is important since in average 22% of the funds' assets are invested in British securities.

Table 4: Characteristics of the SRI funds

This table documents some characteristics of our sample of 102 SRI mutual funds. Panel A reports some descriptive statistic (minimum, maximum, mean and standard deviation) concerning managed assets (in million euros), age (years since inception), management fees per funds (in percentage) and expense ratio (in percentage), as of February 17, 2011. The exchange rate used to convert in euros the fund size given in local currency is the average exchange rate from 17 February 2011 to 7 March 2011 from Oanda. Panel B reports a highlight of the portfolio of the SRI funds considered (average percentage, standard deviation) concerning the European stocks owned by the funds, the share of the fund assets invested in stocks, and the split of the investment among the manufacturing, and service sectors. Panel C reports the number of funds and the percentage of funds investing according the nine investment style framed by Morningstar. Panel D reports the number of funds among the 12 considered countries.

Panel A. SRI Funds	**Mean**	**Std. Dev.**	**Min**	**Max**
Total Asset (Million €)	142.82	216.43	3	1,531
Fund Age (years)	13.36	5.34	4	31
Management Fee (%)	1.50	0.38	0.5	2.5
Total Expense Ratio (%)	1.68	0.59	0.6	5.43

Panel B. SRI Portfolio	**Mean (%)**	**Std. Dev. (%)**
UK	22.32	28.32
Europe (ex UK)	48.96	31.95
Equity	85.49	25.32
Manufacturing	45.00	12.44
Service	37.40	11.38
Panel C. Style	**Freq.**	**Percent**
Small Blend	1	0.98
Medium Growth	9	8.82
Medium Blend	11	10.78
Medium Value	2	1.96
Large Growth	15	14.71
Large Blend	40	39.22
Large Value	24	23.53
Panel D. Fund Domicile	**Freq.**	**Percent**
Austria	5	4.9
Belgium	7	6.86
France	10	9.8
Germany	5	4.9
Italy	6	5.88
Luxembourg	24	23.53
Netherlands	6	5.88
Norway	1	0.98
Spain	2	1.96
Sweden	11	10.78
Switzerland	4	3.92
UK	21	20.59

Most of the funds considered are equity funds, 85 funds among the sample are invested at more than 60% in stocks while on average 85% of the funds' assets of the whole sample are invested in equities. The manufacturing and service sectors represent more than 82% of the total investment of the funds.

Panel C classifies among the nine Morningstar styles, the funds according to the securities they own. The funds tend to have a blend approach, for 51% of them, while on the same time 77% of them target mainly the large capitalization. Only one fund has an investment style mainly oriented toward small companies. Those statistics are aligned with the claim of Wen (2009), for who the SRI funds invest really few their assets in small companies.

Finally Panel D of Table 4 provides the split of the funds across their domicile countries. The data are consistent with the actual situation in Europe where UK, Sweden and France have the lead. The high number of fund located in Luxembourg does not reflect the dynamism its SRI market but rather a particular position of Luxembourg in the financial European market.

Among the twenty one fund governance criteria, I have presented above, ten are not considered in the study due to lack of data. Table 5 reports in an aggregated view the number and percentage of SRI mutual funds which apply the eleven remaining criteria. An important proportion of fund of the sample have a strong disclosure policy. Around 68% of the funds disclose to their clients the changes occurred in the portfolio and provide them the reasons, from a financial and/or sustainable point of view, for excluding (respectively admitting) a fund from the portfolio. More than 74% of the SRI mutual funds of the sample disclose sources and methods used to acquire information about the degree of sustainability of companies included in its portfolio. Hence more than the two third of the funds of the sample disclose directly information about the process of selection of the stocks from a sustainable point of view. The proportion by country of the funds disclosing this information depends of the country. Thus 88% of the British funds considered in this study disclose it, while one third of the Dutch ones do it. Almost all of the funds considered in our study, 89% of them, detail to their client the SRI criteria used to build the portfolio. On average the funds studied here apply 3.1 criteria out of 4 concerning the transparency. The six criteria related to the shareholder activism considered in the study tackle the relationship between the funds and the investee companies about the Corporate Social Responsibility. The shareholder activism is quite important among the sample since on average the funds apply 3.7 criteria out of 7 and even 4.2 on average if only the shareholder activist's funds are considered. 64% of the funds of the sample inform on a regular basis the companies about the funds' decisions; this criterion may be understood as a proxy for a regular dialogue between the investee companies and the fund. Additionally, 66% of the SRI mutual funds of the sample agree to include the CSR issues in the routine meetings about the investee companies. Here again the contrast between the funds in function of their domicile is significant, while no Italian funds of the sample include the CSR issues in the routine meetings, more than 85% of the Belgium, British, French and Swedish ones do it. On the contrary, only 14.7% of the funds affirm having proposed during the last 12 months at least one CSR related resolution. This proportion is consistent with the Social Investment Forum's data (2010). Indeed the mutual are reluctant to propose resolution on the SEE criteria since it may compromise the dialogue with the investee companies (Mackenzie & Sullivan, 2006).

Table 5: Aggregated overview of the sample concerning the fund governance criteria

This table provides snapshot concerning some fund governance criteria related to the SRI issues applied by the European SRI mutual funds considered in this study. For each of these criteria is reported the funds' number using it as well as its corresponding percentage. The last column reports the number of criteria of a given category used by SRI funds, divided by the total number of funds, i.e. 102 for our sample (in parenthesis: the number of criteria of a given category applied by SRI funds, divided by the number of funds which apply this type of criteria).

Fund Gov. Categories	**Fund Gov. Criteria**	**Freq.**	**Percent**	**By Funds: Avg. Nb. of**
Transparency	fundgov2	69	67.65	3.1 (3.4)
	fundgov3	76	74.51	
	fundgov4	89	87.25	
	fundgov5	86	84.31	
Shareholder Activism	fundgov9	65	63.73	3.7 (4.2)
	fundgov10	62	60.78	
	fundgov11	67	65.69	
	fundgov12	59	57.84	
	fundgov13	60	58.82	
	fundgov14	48	47.06	
	fundgov15	15	14.71	
SRI specialization	fully	33	32.35	
	partly	40	39.22	
	outsourced	29	28.43	

Note: fundgov2= Fund provides information about changes in its portfolio, explaining why companies have been admitted/excluded
fundgov3= Fund discloses sources and methods used to acquire information about the degree of sustainability
fundgov4= Fund provides clients with details of SRI criteria used to select its portfolio
fundgov5= Fund informs clients about changes in SRI criteria
fundgov9= Companies are regularly informed about the fund's decisions
fundgov10= Ethical/Socio-environmental profiles sent to screened companies
fundgov11= Fund manager/analysts include Corporate Social Responsibility (CSR) issues in routine meetings
fundgov12= Fund manager has written to companies about issues of concerns during the last 12 months
fundgov13= Fund manager has arranged special meetings with companies during the last 12 months
fundgov14= Fund manager released press briefings and statements during the last 12 months
fundgov15= Fund manager proposed CSR related resolution during the last 12 months
fully= Fund manager fully performs environmental and social analysis
partly= Fund manager partly performs environmental and social analysis
outsourced= Specialized companies performs environmental and social analysis (ex. Vigeo, EIRIS...)

Finally, concerning the SRI specialization of the funds the three possible options, i.e. environmental and social analysis fully/partly performed by the fund manager or outsourced, represents each more or less one third of the funds of the sample. However at level of the country the repartition is quite different, thus the six Italian funds present in the sample have outsourced the environmental and social analysis while only 10% of British funds did it. For more than 55% of the French and British funds of the sample the analysis is partly done by the fund manager.

4. Results

In the following part, we will look at the differential impacts the SRI fund governance criteria have on the performance of the SRI mutual funds. We will then assess the effects those criteria may have on the funds' attractiveness from the point of view of the investors by looking at the money flows.

4.1. The Determinants of SRI mutual funds' financial performance

4.1.1. Methodology

The dependent variable considered is the risk-adjusted performance of a given fund for a given period. The study consider seven different periods, the years from 2006 until 2010, the crisis period 2007-2009 as well as the 2006-2010 period. The CAPM model (Sharpe, 1964) captures the portfolio's excess return over what is expected, given the beta its portfolio systematic risk. According to CAPM:

$$R_{i,t} = \alpha_i + R_{f,t} + \beta_{i,t}(R_{m,t} - R_{f,t}) + \varepsilon_{i,t} \tag{1}$$

From there I obtain the risk-adjusted performance, RAP (Barnett & Salomon, 2006):

$$RAP_{i,t} = R_{i,t} - R_{f,t} - \beta_{i,t}(R_{m,t} - R_{f,t}) = \alpha_i + \varepsilon_{i,t} \tag{2}$$

where $R_{i,t}$ is the monthly return of a given fund, $R_{f,t}$ is the risk free interest rate, $R_{m,t}$ is the market return, α is Jensen's alpha, $\beta_{i,t}$ is the systematic risk of the fund portfolio, ε_t and stands for the idiosyncratic return. For each fund I have computed a time varying beta, using the 36 months past data for each fund at each month see Eq. (3). Therefore the fund's risk loading include the variation of the portfolio risk exposure the fund manager may decide according to macroeconomic conditions. This time varying risk loading is particularly relevant in the study of the crisis period where the funds' risk exposure may have been significantly modified. In this paper, the 6-month German Bunds is used as proxy for the risk free rate; the data come from the Bundesbank. The proxy of the market return is the MSCI Europe Index; the data come from MSCI Barra website. Indeed the funds considered in this study are equity funds whose stocks are mainly European. I have then annualized the monthly risk-adjusted performances for each fund over the different periods considered.

$$\beta_{i,t} = \frac{Covariance(R_i - R_f;\ R_m - R_f)}{Variance(R_m - R_f)} \tag{3}$$

For each of the different periods, I have subsequently regressed the risk-adjusted performance in function of the fund governance criteria I have described above as well as controlling for the funds' characteristics, and the investment style.

Hence the model SRI returns is the following:

$$RAP_{i,t} = \gamma_0 + \gamma_1 Fund\ Governance\ Criteria_i + \gamma_2 Funds'Characteristics_i + \gamma_3 Investment\ Style_i + u_i \quad (4)$$

The fund governance criteria vector contains the twelve criteria I have described in Table 5. Due to the high correlation between the fundgov4 and fundgov5 criteria (their covariance is equal to 0.81, see in Appendix Table 10 for the correlation table), I merged them into fundgov4_5. This criterion takes the value 0 if none of these two criteria are applied by the fund, the value 2 if both are applied, and the value 1 otherwise. It indicates if the fund provides clients with details of SRI criteria used to select the portfolio and informs them about changes among these criteria. I merged together, in a similar way, fundgov12 and fungov13 into fundgov12_13 for the same reason. This criterion takes the value 0 if none of these two criteria are applied by the fund, the value 2 if both are applied, and the value 1 otherwise. The fund governance criteria assessing whether the environmental and social analysis is performed fully/partly by the fund manager or outsourced is divided into two dummy variables Fully, and respectively Outsourced, which take the value 1 if the analysis is fully performed by the manager, and respectively if the analysis if outsourced. I dropped the Partly variable in order to have no collinearity problem. Furthermore the correlation between the Fully and Outsourced variables is only up to -0.44. A complete description of the SRI fund governance criteria used is provided in Appendix Table 9.

The control variables are included in $Funds'Characteristics_i$ and in $Investment\ Style_i$. I used similar control variables than several papers which study the impact on the fund performance of SEE criteria, or of some fund governance criteria. (Barnett & Salomon, 2006; Renneboog, Ter Horst, & Zhang, 2008b; Wellman & Zhou, 2007). Two different $Funds'Characteristics_i$ vectors have been tested. $Funds'Characteristics_i$ of the first model comprises the following variables:

- Log Manager tenure in years as of end of March 2011
- Log Fund size in million of euro
- The percentage of fund's assets invested in equities
- Enterprises' sector which the percentage of fund's assets invested in the manufacturing and in the service sector
- The percentage of fund's assets invested in British securities
- The percentage of fund's assets invested in European (ex UK) securities
- The fee or total ownership cost which is the sum of cost incurred by shareholder. Thus I annuitize both initial and exit load charges by dividing by the number of years. Based on Sirri and Tufano (1998) I assume a period of seven years holding. Hence we obtain:

$$Fee_i = Expense\ Ratio_i + \frac{Total\ Load_i}{7} \quad (5)$$

$Funds'Characteristics_i$ of the second model comprises the following variables :

- Manager tenure in years as of end of March 2011

- Fund size in million of euro
- The percentage of fund's assets invested in equities
- Enterprises' sector which the percentage of fund's assets invested in the manufacturing and in the service sector
- The percentage of fund's assets invested in European securities (UK include)
- The fee or total ownership cost whose computation is detailed above

$Investment\ Style_i$ comprises a set of dummy variables assessing if a given fund invest according the different Morningstar investment styles: Small Blend, Medium Growth, Medium Blend, Medium Value, Large Growth, and Large Blend.

4.1.2. Impact of the fund governance criteria on the SRI mutual fund performance

Table 6 reports the result of the two linear regression models with the OLS methodology. The results have been checked for endogeneity, normality and heteroskedasticity. Panel A contains the results of the linear regression for each year of the sample period, the result of the second model are available in Appendix Table 11. Panel B contains the results of the linear regressions over the crisis period and the five years sample period.

We find the following three interesting results. First SRI funds which disclose the sources and methods used to acquire information about the degree of sustainability decrease the performance of the funds (fungov3), this result is significant at the 5% level (p value=0.018, estimate=-8.51) with the first model and at the 1% level with the second one (estimate= -10.09). However during the crisis period this effect was less strong, even if the significance of the result is also less (at the 10% level with the second model). It is likely that the marginal effect of this disclosure has been overtaken by other macro economical factors which were at this time preponderant. This finding is in line with "the Wrong kind of transparency" developed by Prat (2005); the disclosure on the agent's actions hurt the principal. In the case of the mutual fund industry, the principal is the shareholders and such a disclosure decrease the performance of the mutual fund. Besides the two disclosure criteria I have merged into fundgov4_5, which represents whether or not the fund provides client with details about the SRI criteria used to select the portfolio and informs them about the changes, have a positive impact on the performance of the fund. Although it is not significant during the crisis whatever the regression model used, it is significant at the 1% level over the sample period for both models. The results are similar concerning each year of the sample, with a strong statistical significance for the years out of the financial crisis. This results does not contradict Prat (2005) since the disclosed information are the outcomes of a SRI research work and the ones of the input of the selection process.

Second we find that the execution of the environmental and social analysis by the fund in an internal way have a significant positive impact on the risk adjusted performance (significant at the 5% level). This finding supports the conjecture that SRI research produces value relevant information. Besides I tested the risk

Table 6: The impact of the SRI fund governance on financial performance

The dependent variable is the risk-adjusted performance (RAP) associated to SRI funds... (D) denotes dummy variables. p values are given in parenthesis. *, **, and *** indicate significance level of 10%, 5%, and 1%, respectively.

Panel A	RAP 2010	RAP 2009	RAP 2008	RAP 2007	RAP 2006
Ln(tenure)	-2.97**	-1.99**	-2.39*	-2.36	-1.13
	(.016)	(.042)	(.072)	(.247)	(.37)
Ln(fund size)	-0.5	1.13*	2.14**	2.54*	1.13
	(.535)	(.09)	(.02)	(.096)	(.251)
UK	0.0586	0.0409	-0.173***	-0.303***	0.115**
	(.16)	(.214)	(.)	(.)	(.012)
Europe (ex UK)	0.0185	0.0387	0.112***	-0.00686	0.136***
	(.622)	(.191)	(.007)	(.917)	(.002)
Equity	0.101**	0.113***	0.289***	0.307***	0.296***
	(.011)	(.)	(.)	(.)	(.)
sect_enterprise	0.526***	-0.0031	0.222	-0.237	0.436***
	(.001)	(.979)	(.179)	(.343)	(.012)
Fee	66	80.7	344**	375	228
	(.619)	(.439)	(.018)	(.173)	(.175)
Small Blend (D)	2.13	-5.7	5.23	5.2	0.175
	(.808)	(.408)	(.576)	(.716)	(.984)
Medium Growth (D)	8.49**	-1.87	4.71	6.32	4.76
	(.031)	(.548)	(.27)	(.354)	(.27)
Medium Blend (D)	0.662	-2.46	0.173	8.22	3.36
	(.858)	(.412)	(.966)	(.241)	(.428)
Medium Value (D)	17.2**	2.3	-7.1	-11.5	
	(.012)	(.667)	(.333)	(.309)	
Large Growth (D)	1.4	-3.69	0.781	3.91	1.64
	(.665)	(.154)	(.826)	(.499)	(.656)
Large Blend (D)	1.72	-2.66	-4.75*	0.327	-3.04
	(.483)	(.173)	(.079)	(.939)	(.267)
fundgov2 (D)	2.03	0.985	3.82	2.8	0.546
	(.408)	(.626)	(.167)	(.502)	(.84)
fundgov3 (D)	-6.42**	-1.14	-8.69***	-1.04	-5.29*
	(.03)	(.626)	(.008)	(.831)	(.085)
fundgov4_5 (D)	5.31***	2.93**	3.18	-1.2	3.8*
	(.005)	(.057)	(.135)	(.711)	(.058)
Fully (D)	4.28**	2.65	4.51**	4.38	6.47***
	(.036)	(.103)	(.043)	(.219)	(.005)
Outsourced (D)	-0.296	0.275	-1.4	-2.27	1.75
	(.915)	(.903)	(.649)	(.636)	(.555)
fundgov9 (D)	8.07***	2.9	0.654	-5.52	2.63
	(.001)	(.119)	(.8)	(.195)	(.346)
fundgov10 (D)	-8.58***	-5.31***	-5.45**	-2.52	-7.87***
	(.)	(.007)	(.043)	(.569)	(.006)
fundgov11 (D)	0.121	0.0402	-2.11	-5.04	-2.89
	(.963)	(.986)	(.511)	(.342)	(.377)
fundgov12_13 (D)	-0.74	0.0988	0.595	3.07	1.32
	(.646)	(.938)	(.732)	(.264)	(.434)
fundgov14 (D)	3.34	-1.42	0.668	0.928	1.78
	(.171)	(.472)	(.804)	(.826)	(.495)
fundgov15 (D)	-1.83	-2.87	-3.9	-1.12	-3.86
	(.545)	(.234)	(.234)	(.826)	(.238)

Panel A	RAP 2010	RAP 2009	RAP 2008	RAP 2007	RAP 2006
Constant	-51.8***	-12.6	-54.3***	-13.4	-82.5***
	(.)	(.258)	(.001)	(.57)	(.)
R^2	0.596	0.496	0.764	0.639	0.729
Adjusted R^2	0.465	0.328	0.684	0.51	0.628
Nb. of Obs.	99	97	96	92	86
Root MSE	7.64	5.99	8.14	12.2	7.37

Panel B	Crisis Period (1)	Crisis Period (2)	Sample Period (1)	Sample Period (2)
Tenure	-0.25		-0.33	
	(.21)		(.187)	
Ln(tenure)		-2.3**		-2.88*
		(.038)		(.051)
Fund size	0.00524		-0.00175	
	(.325)		(.8)	
Ln(fund size)		1.51*		0.731
		(.065)		(.521)
Europe (with UK)	-0.0264		0.0354	
	(.46)		(.44)	
UK		-0.152***		-0.0911*
		(.)		(.084)
Europe (ex UK)		0.0398		0.0959*
		(.262)		(.052)
Equity	0.241***	0.254***	0.358***	0.381***
	(.)	(.)	(.)	(.)
sect_enterprise	-0.0156	0.00024	0.63***	0.634***
	(.92)	(.999)	(.005)	(.002)
Fee	186	164	293	251
	(.236)	(.266)	(.132)	(.198)
Small Blend (D)	-15.1*	1.35	-12.7	3.67
	(.071)	(.86)	(.21)	(.716)
Medium Growth (D)	-4.21	2.26	4.43	10.3**
	(.28)	(.537)	(.384)	(.043)
Medium Blend (D)	-4.41	2.07	-0.454	5.9
	(.274)	(.582)	(.927)	(.233)
Medium Value (D)	-9.16	-6.77		
	(.184)	(.267)		
Large Growth (D)	-1.46	-0.542	1.68	4.53
	(.661)	(.861)	(.689)	(.29)
Large Blend (D)	-6.45***	-3.02	-4.22	-0.783
	(.01)	(.192)	(.178)	(.805)
fundgov2 (D)	4.53*	2.35	4.9	1.95
	(.063)	(.295)	(.116)	(.537)
fundgov3 (D)	-5.39*	-3.44	-10.9***	-8.51**
	(.077)	(.192)	(.005)	(.018)
fundgov4_5 (D)	3.17	1.28	7.55***	5.22**
	(.118)	(.461)	(.003)	(.025)
Fully (D)	4.39**	4.65**	8.13***	7.43***
	(.048)	(.017)	(.005)	(.005)
Outsourced (D)	1.65	-1.21	1.06	-1.39
	(.573)	(.637)	(0.775)	(.684)
fundgov9 (D)	-0.0207	-1.08	7.03**	6.47**
	(.994)	(.635)	(.039)	(.048)
fundgov10 (D)	-3.44	-3.13	-11.5***	-11.2***
	(.196)	(.19)	(.001)	(.001)
fundgov11 (D)	-0.0141	-3.41	-1.77	-4.33
	(.996)	(.231)	(.658)	(.255)
fundgov12_13 (D)	0.659	1.6	0.258	1.1
	(.7)	(.28)	(.903)	(.573)
fundgov14 (D)	0.707	0.743	4.06	4.61
	(.786)	(.743)	(.209)	(.13)
fundgov15 (D)	-7.08**	-2.58	-9.64**	-5.91

Panel B	Crisis Period (1)	Crisis Period (2)	Sample Period (1)	Sample Period (2)
	(.023)	(.347)	(.017)	(.121)
Constant (D)	-20.2	-23.9**	-94.1***	-94.1***
	(.178)	(.061)	(.)	(.)
R^2	0.654	0.761	0.734	0.795
Adjusted R^2	0.542	0.676	0.645	0.719
Nb. of Obs.	95	92	89	86
Root MSE	7.71	6.58	9.45	8.56

adjusted performance's mean of funds performing internally an SRI research against those which outsource it (see in Appendix Table 12). The results, which are statistically significant at the 5% level, confirm the conjecture that funds which outsource their SRI research perform worst than those which do it internally. The results concerning whether outsource such an activity impact positively or negatively the risk adjusted performance remain ambiguous. The estimates have not a constant sign and are not statistically significant.

Third, though the results concerning the shareholder activism of the fund are mostly statistically insignificant, three of those criteria provide interesting results. The fact for a fund to inform regularly the firm concerning its SRI related decisions (criterion fundgov9), have a positive significant effect on the performance at the 5% level over the year 2010 and the overall sample period. However if a fund send to its investee companies their social, environmental and ethical profile (fundgov10), the fund knows an abnormal decrease of its performance. The results are significant at the 1% level on all the different periods studied with the exception of the crisis period where they are statistically insignificant. The profile realized by the SRI mutual fund and sent to the company may be perceived as a proxy to deep SRI selection or deep SRI involvement and so of high SRI research cost, high SRI engagement cost. Indeed by sorting the funds in function of the number of screens used for the selection of the portfolio and in function of whether or not they apply the fungov10 criterion, I noticed funds which send to the investee companies their social, environmental, and ethical profile use a higher number of screens (see Appendix Table 13). In order to check that the difference in the number of screens used is statistically significant, I performed a Wald test. The result confirm at the 1% level a difference of in average 4.29 screens between funds which send the SEE profile and those which do not. Nevertheless further investigation and study are required in order to be able to interpret it in a proper way.

In order to assess the possibility that the reduction of performance captured by the funggov10 criterion is related to a high SRI involvement cost, I add to the fund characteristic vector two variables: feexfundgov10 and $(feexfundgov10)^2$. This two added variables are a proxy to measure the cost of deep SRI research or deep SRI involvement. In order to avoid some endogeneity problem, the fundgov10 criteria has been taken out from the $Fund\ Governance\ Criteria_i$ vector. The results of the linear regression over the crisis period and the sample period are provided in Appendix Table 14. The quadratic relation between the risk adjusted performance and the two added variables is statistically significant at the 10% level (feexfundgov10 p value=0.001 and $(feexfundgov10)^2$ p value= 0,086). Figure 6 in the Appendix shows the impact on performance due to the tradeoff between the cost of deep SRI involvement and the benefits the fund can gain from it through valuable information or prevention of SEE risks… The curve presents a minimum for fee=0.024 and the average fee for funds applying the fundgov10 criterion is 0.022. Besides I performed a Wald test to study the difference of the average fee between the SRI mutual funds which apply the fungov10 criterion and those which do not. The estimate mean difference is equal to 0.0023 and is superior to zero at the 5% level, this finding agrees with the conjecture that funds sending to the investee companies their SEE profile ask their clients higher fee.

Finally even though the fungov15 criterion is significant (at the 5% level) only with the first linear regression model, the evidence that the proposition by the fund of resolution on Corporate Social Responsible issues during the last 12 month may hurt the fund performance, arises two questions. On the first hand, has the resolution been filled due to the unsuccessful dialogue with the company? , and so has compromised the relationship with the company managers both on the SRI issues and classical (financial, economical, organizational…) ones. On the other hand, are the SEE criteria misevaluated by the market?

4.2. Determinant on SRI mutual fund's financial risk

4.2.1. Methodology

Whereas I investigated the impact of the SRI fund governance on the risk-adjusted performance for SRI mutual fund, I now examine the SRI mutual fund risk. For this purpose I consider the SRI mutual fund risk loading, or beta, and the standard deviation of monthly excess return and estimate the following regressions:

$$\beta_{i,t} = \gamma_0 + \gamma_1 Fund\ Governance\ Criteria_i + \gamma_2 Funds'Characteristics_i + \gamma_3 Investment\ Style_i + u_i \quad (6)$$

$$\sigma_{i,t} = \gamma_0 + \gamma_1 Fund\ Governance\ Criteria_i + \gamma_2 Funds'Characteristics_i + \gamma_3 Investment\ Style_i + u_i \quad (7)$$

$\beta_{i,t}$ stands for the beta of SRI mutual fund i over the crisis period, the years 2007 to 2008, or over the sample period, from 2006 to 2010, using Eq. (3). $\sigma_{i,t}$ stands for the standard deviation of monthly excess return for each SRI mutual fund i . The standard deviation is estimated over both the crisis period and the full sample period as follow where T refers to the period considered:

$$\sigma_{i,t} = \sqrt{\frac{1}{T} \cdot \sum_{T} \left(R_i - R_f - \overline{R_i - R_f}\right)^2} \quad (8)$$

The explanatory variables are the same than those used in the previous section at Eq. (4). I consider here again the two regression models defined above.

4.2.2. Impact of the fund governance criteria on the SRI mutual fund risk

Table 7 reports the results of the two linear regression models performed using the OLS methodology. The results have been checked for endogeneity, normality and heteroskedasticity. Panel A contains the results of the linear regression of the beta over both the crisis and sample periods. Panel B contains the results of the linear regressions over the crisis period and the five years sample period of the excess return's standard deviation. In both case for the two models, the R-squared is over 80% and even 85% in the case of the beta showing a good fit of the tested models.

In both linear regressions, beta and standard deviation of the excess return (sigma), the estimates as well as the significances of the determinants have the same trends. The fund governance criteria related to transparency criteria seem to decrease the market risk exposure when the disclosure is about the agent's actions (fundgov2 and fudgov3) though the results are not significant, whereas it increases when the disclosure is about the outcomes (fundgov4_5) at the 10% level. A slight increase of the beta by 6.7% to 7.7% and of the sigma by 48 to 60 basis points (at the 5% level for both) occurred when the manager fully perform the social and environmental analysis. The potential effect of the shareholder activism on both the market exposure and the risk is ambiguous. While the disclosure to the investee company of its social, environmental and ethical profile tend to decrease the risk exposure (fundgov10) by 13.3% to 14.6% for the beta and by 1.07% to 1.35% concerning sigma at the 1% level, the arrangement of special meetings with the investee companies or the letters' writing about SRI issues (fundgov12_13) tend to increase slightly the risk. Nevertheless on the whole the engagement tends to decrease both the market exposure and the fund risk. In addition I also show the SRI mutual fund characteristics are related to the market risk exposure as well as fund risk. SRI funds with experienced fund manager tend to have a lower risk while funds with higher fee have higher risk exposure to the market as well as higher standard deviation of their excess return.

Table 7: the impact of the SRI fund governance on financial risk

Panel A reports the estimates of determinants of beta (see Eq. (6)) for European SRI mutual funds. The dependent variable is the beta of fund i over the crisis and sample period.
Panel B reports the estimates of determinants of European SRI mutual funds' excess return standard deviation (see Eq. (7)). The dependent variable is the excess return standard deviation of fund i over the crisis and sample period.
(D) denotes dummy variables. p values are given in parenthesis. *, **, and *** indicate significance level of 10%, 5%, and 1%, respectively.

Panel A Beta	Crisis Period (1)	Crisis Period (2)	Sample Period (1)	Sample Period (2)
Tenure		-0.00486*		-0.00444*
		(.064)		(.062)
Ln(tenure)	-0.0446***		-0.0416***	
	(.009)		(.007)	
Fund size		0.00003		0.0000045
		(.651)		(.94)
Ln(fund size)	0.0162		0.0127	
	(.143)		(.206)	

Panel A Beta	Crisis Period (1)	Crisis Period (2)	Sample Period (1)	Sample Period (2)
Europe (including UK)		0.00129***		0.00142***
		(.006)		(.001)
UK	0.00063		0.00086*	
	(.264)		(.097)	
Europe (ex. UK)	0.00168***		0.00178***	
	(.001)		(.)	
Equity	0.00832***	0.00857***	0.00819***	0.00842***
	(.)	(.)	(.)	(.)
sect_enterprise	-0.000066	0.00033	0.00119	0.00166
	(.974)	(.873)	(.518)	(.378)
Fee	3.29*	1.93	3.33**	2.18
	(.072)	(.278)	(.045)	(.178)
Small Blend (D)	0.0605	-0.0368	0.0462	-0.0406
	(.613)	(.745)	(.67)	(.692)
Medium Growth (D)	-0.00727	-0.0469	0.00659	-0.0288
	(.891)	(.341)	(.891)	(.519)
Medium Blend (D)	-0.00263	-0.0624	-0.00361	-0.0577
	(.959)	(.168)	(.937)	(.16)
Medium Value (D)	-0.0579	-0.09	-0.0481	-0.0787
	(.529)	(.323)	(.563)	(.34)
Large Growth (D)	-0.0172	-0.0428	-0.0159	-0.041
	(.697)	(.301)	(.692)	(.275)
Large Blend (D)	-0.0403	-0.0684**	-0.0408	-0.0655**
	(.229)	(.03)	(.179)	(.022)
fundgov2 (D)	-0.00649	-0.0112	0.00609	0.00146
	(.846)	(.725)	(.841)	(.96)
fundgov3 (D)	-0.0292	-0.0398	-0.0419	-0.0539
	(.463)	(.33)	(.246)	(.148)
fundgov4_5 (D)	0.0414	0.054**	0.0427*	0.0552**
	(.106)	(.04)	(.067)	(.021)
Fully (D)	0.0675**	0.0737**	0.069***	0.0767***
	(.016)	(.011)	(.007)	(.004)
Outsourced (D)	0.0233	0.0387	0.0331	0.0458
	(.537)	(.299)	(.334)	(.177)
fundgov9 (D)	0.0336	0.0306	0.0338	0.0301
	(.275)	(.312)	(.226)	(.274)
fundgov10 (D)	-0.145***	-0.133***	-0.146***	-0.135***
	(.)	(.)	(.)	(.)
fundgov11 (D)	-0.0243	-0.0172	-0.0158	-0.0117
	(.5)	(.639)	(.629)	(.726)
fundgov12_13 (D)	0.0505**	0.0576**	0.0466**	0.0546***
	(.024)	(.012)	(.021)	(.009)
fundgov14 (D)	-0.00113	-0.00589	-0.00511	-0.0108
	(.973)	(.861)	(.865)	(.723)
fundgov15 (D)	-0.0681	-0.0943**	-0.0477	-0.0694**
	(.102)	(.023)	(.204)	(.063)
Constant	-0.00988	-0.0114	-0.112	-0.131
	(.958)	(.954)	(.517)	(.463)
R^2	0.885	0.875	0.899	0.89
R^2 adjusted	0.847	0.838	0.867	0.858
Nb. of Obs.	99	102	99	102
Root MSE	0.104	0.106	0.0945	0.0965

Panel B Excess Ret. Std. Dev.	Crisis Period (1)	Crisis Period (2)	Sample Period (1)	Sample Period (2)
Tenure		-0.0445**		-0.0491**
		(.033)		(.026)
Ln (tenure)	-0.372***		-0.419***	
	(.006)		(.004)	
Fund size		0.00049		0.00043
		(.349)		(.438)

Panel B Excess Ret. Std. Dev.	Crisis Period (1)	Crisis Period (2)	Sample Period (1)	Sample Period (2)
Ln (Fund size)	0.17*		0.19**	
	(.056)		(.043)	
Europe (including UK)		0.00878**		0.00956**
		(.018)		(.015)
UK	0.00531		0.00549	
	(.244)		(.251)	
Europe (ex. UK)	0.0107**		0.012***	
	(.011)		(.007)	
Equity	0.0505***	0.0525***	0.0546***	0.057***
	(.)	(.)	(.)	(.)
sect_enterprise	0.00152	0.00242	0.00932	0.0112
	(.926)	(.883)	(.586)	(.521)
Fee	30.6**	19.6	35.8**	23.6
	(.038)	(.166)	(.021)	(.115)
Small Blend (D)	0.474	-0.033	0.503	-0.105
	(.621)	(.971)	(.617)	(.911)
Medium Growth (D)	0.202	0.0214	0.379	0.156
	(.634)	(.956)	(.395)	(.705)
Medium Blend (D)	0.129	-0.241	0.196	-0.249
	(.752)	(.499)	(.646)	(.51)
Medium Value (D)	-0.14	-0.247	-0.025	-0.159
	(.849)	(.731)	(.974)	(.834)
Large Growth (D)	-0.139	-0.261	-0.126	-0.273
	(.695)	(.426)	(.735)	(.429)
Large Value (D)	-0.321	-0.455*	-0.32	-0.474*
	(.232)	(.067)	(.257)	(.071)
fundgov2 (D)	-0.0533	-0.138	0.0464	-0.0456
	(.843)	(.584)	(.869)	(.864)
fundgov3 (D)	-0.277	-0.295	-0.422	-0.461
	(.386)	(.363)	(.21)	(.18)
fundgov4_5 (D)	0.271	0.344*	0.321	0.416*
	(.187)	(.097)	(.137)	(.059)
Fully (D)	0.479**	0.509**	0.548**	0.598**
	(.033)	(.026)	(.02)	(.014)
Outsouced (D)	0.0775	0.151	0.148	0.233
	(.798)	(.609)	(.643)	(.455)
fundgov9 (D)	0.195	0.191	0.217	0.209
	(.428)	(.426)	(.4)	(.41)
fundgov10 (D)	-1.17***	-1.07***	-1.35***	-1.23***
	(.)	(.)	(.)	(.)
fundgov11(D)	-0.216	-0.174	-0.169	-0.132
	(.457)	(.548)	(.578)	(.668)
fundgov12_13 (D)	0.349*	0.401**	0.356*	0.427**
	(.051)	(.027)	(.058)	(.026)
fundgov14 (D)	0.0473	0.0513	0.0581	0.0505
	(.859)	(.847)	(.835)	(.858)
fundgov15 (D)	-0.506	-0.672**	-0.46	-0.639*
	(.13)	(.039)	(.188)	(.064)
Constant	0.356	0.605	-0.133	0.071
	(.815)	(.697)	(.934)	(.966)
R^2	0.834	0.824	0.845	0.833
R^2 adjusted	0.78	0.773	0.795	0.783
Nb. Of Obs.	99	102	99	102
Root MSE	0.837	0.843	0.878	0.892

4.3. Determinant on SRI mutual fund's attractiveness

4.3.1. Methodology

In this following section, I examine the impact of the SRI fund governance on the investment decision making of the investors. The dependent variable considered is the variation in percentage of the fund size due to the money inflow or outflow. Morningstar provided me kindly with different databases containing the monthly funds size of my sample[26]. I checked that the two databases were consistent and merged them to reduce the number of missing data. The funds for which both the estimated fund size and the raw one were provided, I kept the raw fund size which is more accurate. The growth rate of the fund size beyond assets appreciation, or flow, is defined as follow (assuming new money is invested at the end of each month) (Qian, 2006; Renneboog, Ter Horst, & Zhang, 2008b):

$$Flow_{i,t} = \frac{\left(TNA_{i,t} - TNA_{i,t-1} \cdot \left(1 + R_{i,t}\right)\right)}{TNA_{i,t-1}} \quad (9)$$

In order to have consistent results, I apply a panel data specification with a between year effect and a random fund effect over the year 2010 and 2009. I examine the relation between the growth rate of the fund size due to money inflow or outflow and the SRI fund governance, controlling for fund past return, fund characteristic and investment style:

$$Flow_{i,t} = \gamma_0 + \gamma_1 Fund\ Governance\ Criteria_i + \gamma_2 Fund\ Past\ Return_{i,t-K:t-1} + \gamma_3 Fund\ Characterisics_i + \gamma_4 Investment\ style_i \quad (10)$$

The $Fund\ Governance\ Criteria_i$ vector contains all the different SRI fund governance criteria studied previously (see in Appendix Table 9).

Following Qian (2006) I control the linear regression by the fund past return. $Fund\ Past\ Return_{i,t-K:t-1}$ vector is composed of the cumulative return of fund i from month $t-K$ to month $t-1$ and of the square value of this return. The convex relationship in the mutual fund industry between the flow and performance motivates a quadratic term in the regression (Sirri & Tufano, 1998). The duration K takes 3, 6, or 12 months. The return measure used is the excess return since the investors does not consider the risk adjusted performance but the return or excess return (Del Guercio & Tkac, 2002; Ippolito, 1992).

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[26] The first database is the "Fund size estimated" which is the sum of all share-class TNAs for a given fund that existed at the end of a given month. All share class TNAs must be greater than zero in order for estimated fund size to be computed. This figure is computed uniformly for all open-end mutual funds globally.
The second database is the "Raw fund size". It is sourced directly from fund companies in certain geographic regions. Participation in this survey varies by fund company, which is why we also compute estimated fund size if possible. Raw fund size is generally thought to be more accurate than estimated fund size because of the possibility that some of the fund's assets are distributed via non-public share classes. This figure is not, however, intended to capture all assets under management for a particular strategy. That is, it is not meant to encapsulate assets that are distributed through the pension, insurance, or other non-open-end legal structures.

The $\mathit{Fund\ Characterisics}_i$ vector is slightly modified compared to the previous linear regression. It is composed of the following variables:

- Log Manager tenure in years as of end of March 2011
- Log Fund age in years as of end of March 2011
- Log Fund size in million of euro
- The percentage of fund's assets invested in equities
- Enterprises' sector which the percentage of fund's assets invested in the manufacturing and in the service sector
- The percentage of fund's assets invested in British securities
- The percentage of fund's assets invested in European (ex UK) securities
- The fee or total ownership cost which is the sum of cost incurred by shareholder

The $\mathit{Investment\ style}_i$ vector contains as previously six of the nine investment styles defined by Morningstar, one being dropped to avoid collinearity problem[27]: Small Blend, Medium Growth, Medium Blend, Medium Value, Large Growth, and Large Blend. I add to this vector four variables controlling the type of SRI mutual funds choose: the number of environmental screen, the number of social screen, the number of screen related to corporate governance and the number of banned industry screens used by the fund i .

4.3.2. Impact of the fund governance criteria on the SRI mutual fund's attractiveness

I discarded the results concerning the estimates of determinants of the flow of 2008 and 2007, since they were insignificant and that the joint hypothesis that all estimates were equal to zero wasn't rejected at the usual significance level. Table 8, here under, reports the estimates of determinant of the flow of 2010 (in Appendix Table 15 reports the results concerning the flow of 2009).

Though the regression is not extremely significant concerning the SRI fund governance, four different patterns can be found and examined. First the investors are quite sensitive to the investment style followed by the SRI mutual fund. The Medium Blend, Medium Value, and Large Blend but only for the between estimators, have a positive effect on the investor from 2.5% to 6% per annum. The number of screens related to environmental, social or corporate governance issues used by the funds to select the portfolio can be considered as a proxy on the theme of the fund or on its involvement in the SRI strategy. They have

[27]Funds with Small Growth and Small Value investment style are not present in the sample. Large Value has been discarded in order to avoid correlation problem.

Table 8: Impact of the SRI fund governance on fund attractiveness, flow 2010

Table 8 reports the estimates of determinants of the growth rate of the fund size beyond assets appreciation (see Eq. (10)) for European SRI mutual funds over the year 2010. The dependent variable is the flow of fund i over 2010, i.e. the variation in percentage of its fund size due to money inflow or outflow. K corresponds to the duration on which the cumulative past fund return has been calculated. The estimates in the three last columns are the between estimators.

(D) denotes dummy variables. p values are given in parenthesis. *, **, and *** indicate significance level of 10%, 5%, and 1%, respectively.

Flow 2010	K=3	K=6	K=12	K=3 Be	K=6 Be	K=12 Be
Fund return	0.128**	-0.457	0.00695	0.0305	4.84*	0.145
	(.039)	(.499)	(.832)	(.924)	(.056)	(.274)
Fund return^2	-1.38**	0.233	-0.00143	-3.03	-2.29*	-0.418**
	(.041)	(.461)	(.979)	(.224)	(.052)	(.05)
Ln(tenure)	-0.00199	-0.00181	-0.00204	-0.00294	-0.00249	-0.00235
	(.592)	(.626)	(.583)	(.399)	(.475)	(.491)
Ln(fund age)	-0.00538	-0.00519	-0.00512	-0.00484	-0.00493	-0.00515
	(.509)	(.524)	(.531)	(.5)	(.488)	(.467)
Ln(fund size)	-0.00143	-0.00145	-0.0014	-0.0013	-0.00155	-0.00151
	(.57)	(.567)	(.579)	(.561)	(.481)	(.486)
Small Blend (D)	0.0218	0.0209	0.0226	0.0261	0.0299	0.0288
	(.371)	(.391)	(.353)	(.244)	(.18)	(.18)
Medium Growth (D)	0.00853	0.00859	0.0086	0.00854	0.00942	0.0101
	(.443)	(.44)	(.44)	(.385)	(.334)	(.298)
Medium Blend (D)	0.0288***	0.0289***	0.0288***	0.0299***	0.0284***	0.0262***
	(.008)	(.008)	(.008)	(.003)	(.004)	(.007)
Medium Value (D)	0.058***	0.0596***	0.059***	0.055***	0.0571***	0.053***
	(.002)	(.002)	(.002)	(.002)	(.001)	(.002)
Large Growth (D)	0.00901	0.00942	0.00963	0.0095	0.00972	0.00655
	(.366)	(.345)	(.336)	(.28)	(.262)	(.451)
Large Blend (D)	0.0122	0.0118	0.0122	0.0137**	0.0163**	0.0151**
	(.107)	(.121)	(.109)	(.046)	(.021)	(.027)
Fee	-0.0594	-0.0464	-0.0379	-0.0778	0.00276	-0.139
	(.872)	(.9)	(.919)	(.812)	(.993)	(.665)
sect_enterprise	-0.000518	-0.000524	-0.000528	-0.000548	-0.000546	-0.00053
	(.244)	(.24)	(.236)	(.166)	(.159)	(.168)
UK	-0.000217*	-0.000215*	-0.000211*	-0.000211**	-0.000205*	-0.000189*
	(.068)	(.07)	(.075)	(.049)	(.058)	(.073)
Europe (ex UK)	-0.000108	-0.000106	-0.000101	-0.0000857	-0.0000907	-0.0000786
	(.368)	(.377)	(.402)	(.442)	(.403)	(.456)
Equity	-0.0000952	-0.0000903	-0.0000954	-0.000106	-0.000114	-0.000151
	(.409)	(.434)	(.41)	(.311)	(.262)	(.149)
Env	-0.00869***	-0.0085***	-0.00859***	-0.00921***	-0.00944***	-0.00939***
	(.007)	(.009)	(.008)	(.002)	(.001)	(.001)
Soc	-0.00292	-0.00262	-0.00268	-0.00286	-0.00328*	-0.00254
	(.179)	(.228)	(.217)	(.149)	(.094)	(.182)
Gov	0.00735	0.00721	0.00723	0.00754*	0.00759*	0.00724*
	(.136)	(.144)	(.143)	(.081)	(.076)	(.088)
Cbi	0.000794	0.000728	0.000747	0.00097	0.000922	0.000803
	(.471)	(.509)	(.499)	(.322)	(.339)	(.405)
fundgov2 (D)	-0.000146	-0.000754	-0.000614	0.000543	0.000434	-0.00236
	(.984)	(.916)	(.931)	(.931)	(.944)	(.701)
fundgov3 (D)	0.0156*	0.0154*	0.0154*	0.0147*	0.0166**	0.0156*
	(.099)	(.101)	(.102)	(.08)	(.048)	(.06)
fundgov4_5 (D)	-0.00888	-0.00884	-0.00882	-0.00944*	-0.0099*	-0.00807
	(.174)	(.176)	(.178)	(.099)	(.086)	(.153)
Fully (D)	-0.000917	-0.00106	-0.00105	-0.00017	-0.00056	-0.000374
	(.897)	(.881)	(.883)	(.978)	(.927)	(.951)
Outsourced (D)	-0.0208**	-0.0208**	-0.0209**	-0.0206***	-0.0211***	-0.0224***
	(.013)	(.013)	(.013)	(.007)	(.005)	(.003)
fundgov9 (D)	0.00991	0.00933	0.00945	0.00889	0.0101*	0.00942

Flow 2010	**K=3**	**K=6**	**K=12**	**K=3 Be**	**K=6 Be**	**K=12 Be**
	(.139)	(.164)	(.159)	(.14)	(.087)	(.106)
fundgov10 (D)	-0.00582	-0.00583	-0.00589	-0.00529	-0.00583	-0.00535
	(.458)	(.458)	(.453)	(.438)	(.387)	(.423)
fundgov11 (D)	-0.00848	-0.00869	-0.00866	-0.00794	-0.00659	-0.00517
	(.327)	(.316)	(.318)	(.297)	(.383)	(.497)
fundgov12_13 (D)	-0.00664	-0.00649	-0.00649	-0.00582	-0.00673	-0.00673
	(.179)	(.19)	(.19)	(.185)	(.119)	(.115)
fundgov14 (D)	0.0157**	0.0157**	0.0156**	0.0144**	0.0151**	0.0139**
	(.035)	(.035)	(.037)	(.034)	(.024)	(.035)
fundgov15 (D)	0.0157	0.0158	0.0156	0.015*3	0.0148*	0.0183**
	(.116)	(.113)	(.119)	(.082)	(.089)	(.038)
Constant	0.0921**	0.312	0.0895**	0.0995**	-2.45*	0.0932**
	(.03)	(.388)	(.035)	(.011)	(.071)	(.019)
R^2	0.49	0.473	0.4805	0.505	0.517	0.525

a significant impact on the attractiveness of the fund. The more environmental screens a fund has the less the investors are attracted by the fund. At each increase by one environmental screen the fund decreases its funds size growth rate beyond assets appreciation between 0.88% and 0.94% per annum (significant at the 1% level). On the contrary the addition of one corporate governance related screen increases the fund flow by 0.72% to 0.76% per annum. However these impacts are not strongly corroborated by the regression over the years 2009.

Second I find that transparency in accordance with the literature increase the attractiveness of the SRI mutual fund from the point of view of the investors since it contributes to reduce both the information asymmetry and the agency problem. Thus the disclosure of sources and methods used to select the portfolio (fundgov3 criterion) increase the growth rate of the fund size due to money inflow. This effect is observed in the regressions over 2010 and 2009. Since the disclosure of sources and methods used to assess the degree of sustainability of the investee companies is quite contested by the major party of fund managers (Haigh & Guthrie, 2010), I assumed that funds which disclose this information policy have a strong transparency policy (see H4 p35). On the contrary, funds which refuse to disclose it have a weak transparency policy. Nevertheless this result is not confirmed by the two other criteria related to transparency due to a lack of significance.

Surprisingly the use of external companies to perform the environmental, social and ethical analysis reduce the attractiveness of the by 2.06% to 2.24% per annum at the 1% level. However this negative impact of this externalization is observed only in the regression over 2010. The regression does not allow discovering any pattern concerning this same activity but performed internally by the fund.

Finally there are weak evidences that the shareholder activism contribute to attract shareholder to invest in the SRI mutual fund. The fact for a fund to release press briefing and statement concerning SRI issues (fundgov14 criterion) as well as to propose CSR related resolution seems to attract the investors (fundgov15 criterion). These both criteria are significant at the 5% and 10% respectively for the regression over 2010, but this outcome is not confirmed over the year 2009.

5. Conclusion

Aside from the financial investing mainstream, appeared in the 60s an "ethical" branch which grew up until it is nowadays qualified as a mainstream approach in Western Europe as well as in the US. This strategy called today Social Responsible Investment (SRI), "a generic term covering any type of investment process that combines investors' financial objectives with their concerns about Environmental, Social and Governance (ESG) issues" (Eurosif, 2010), knew in the late 2000s a strong growth especially in Europe, where the assets under SRI management jumped from €1.1 trillion in 2005 to €5 trillion in 2009. The growth and the value of assets under SRI management are notwithstanding quite disparate across the Europe. The public regulation played an important role in the quick development of the Social Responsible Investment in the recent years. The UK (2000), Sweden (2000), France (2001), Germany (2002), Austria (2004), Belgium (2004), Italy (2005), Denmark (2010) forced the pensions funds to disclose at what extend the environmental, social and ethical criteria were taken into account in their investment policy. Although there is not yet a common European regulation on the SRI issue, the European Union as well as its members introduced several initiatives to foster the SRI approach. This paper provides the different initiatives taken by the national government as well as the European Union to develop the SRI industry.

This thesis studies the impact of the SRI fund governance on the risk, risk-adjusted return and money flows of the European SRI mutual fund. The main hypothesis is that the SRI fund governance, through the transparency policy, the SRI specialization and the shareholder activism, influences the stock prices and the investment decisions of the investors. The reason why a SRI investor would choose a SRI mutual fund rather another is not only based on its past performance but also on the quality of its fund governance which has a key role in the reduction of both the agency problem and the information asymmetry. Notwithstanding, fund governance too generous toward the investors concerning the disclosure may reduce the performance of the fund due to the possible mimicking or anticipating strategies employed by the other funds. In addition, investors would expect SRI fund outperform its benchmark if the SRI fund specialization produce valuable information and if strong shareholder activism prevent social, environmental, and ethical risk, foster customer loyalty, as well as increase companies' efficiency…

I find that the disclosure of information about the sources and methods used to select the portfolio decreases in a quite important way, -8.51% to -10.09% per annum, the performance of the SRI mutual fund. Alternatively the disclosure of the criteria used to build the portfolio and of the changes about them tends to increase the performance of the SRI mutual funds. Both results are less strong and significant during the crisis period and even insignificant sometimes. The marginal effect of the disclosure may likely have been overtaken by some macro economical factors during this period. The opposite results concerning two different types of disclosure one on a process the other on the input or outcomes of a process accredit the existence of a "wrong kind of transparency".

Performing internally a social environmental and ethical analysis increases the risk adjusted performance of the SRI mutual funds. It corroborates the fact that SRI research produces valuable information for the selection of the portfolio. I find besides the contribution to the performance is higher if the analysis is done internally instead to be outsourced.

The impact of the engagement on the risk-adjusted performance is quite ambiguous. While a constant dialogue with the investee companies about the SRI issues seems to be positive for the risk adjusted performance, a deep SRI involvement seems to impact negatively the risk adjusted performance. Indeed the marginal positive effect of this deep SRI involvement may generate, does not cover its cost. I also measure the effect of the use of formal shareholder rights on the risk adjusted performance. It appears the proposition of resolution on CSR issues harm the performance of the fund. The reasons why it has a negative impact, deterioration of the dialogue with the company, or misevaluation of ESG factors by the market have not been look at in this study, but may be the topic of future papers on the SRI issues.

I also examined the impact of the SRI fund governance criteria on the total risk borne by shareholders and the exposure to the market. The results I obtained are similar for the two kinds of risk. The disclosure of information on the SRI criteria used to select the portfolio tends to increase both the risk exposure to the market and the total risk. The marginal effect of the disclosure has been likely overtaken during the financial crisis period by some macro economical factors. SRI fund in-house research appears to increase slightly the risk exposure to the market as well as the total risk borne by shareholders. As previously concerning the risk adjusted performance the impact of the shareholder activism is ambiguous. While the disclosure to the investee companies of their SEE profile and the use of formal shareholders rights on SRI issues tends to decrease significantly the market risk exposure and the total risk, the dialogue on such issues trough the arrangement of special meeting or the letters' writing on SRI concern increases slightly the risk. Nevertheless on the whole the shareholder activism seems to decrease both the market exposure and the total risk borne by investors.

Finally I looked at whether a SRI fund governance effect exists for SRI mutual funds by investigating the relation between SRI money flows and SRI fund governance criteria: transparency, SRI specialization, and shareholder activism. I find mixed results: while higher transparency and higher shareholder activism tend to increase the money inflow, the externalization of the ESG analysis to a dedicated company seems to create disincentive for the investors to invest in such a fund. The results obtained are strongly significant over the year 2010 but few of them are corroborated by the regression over the previous years.

This study arises some potential fiduciary duty problems concerning SRI fund governance. The fiduciary duty requires the trustees, fund managers and advising consultants to act in the "best interest" of the beneficiaries. While a higher transparency about the agent actions tends to attract more the investors, it harms in the same time the performance of the fund. The fund companies whose earnings depend more on the size of the fund than its performance, can thus be tempt to satisfy the investors by disclosing some of their stocks selection processes even if it harm the performance of the fund and so the investors. The same thinking can be held for the shareholder activism although the results concerning the beneficial impacts of this strategy on the fund performance is still quite ambiguous.

“Wealth, like happiness, is never attained when sought after directly. It comes as a by-product of providing a useful service.”

Henry Ford

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7. Appendix

Table 9: The SRI fund governance criteria

Fund Governance Criteria	Description
fundgov2	Fund provides information about changes in its portfolio, explaining why companies have been admitted/excluded
fundgov3	Fund discloses sources and methods used to acquire information about the degree of sustainability
fundgov4_5	Fund provides clients with details of SRI criteria used to select its portfolio and informs them about changes
fundgov9	Companies are regularly informed about the fund's decisions
fundgov10	Ethical/Socio-environmental profiles sent to screened companies
fundgov11	Fund manager/analysts include Corporate Social Responsibility (CSR) issues in routine meetings
fundgov12_13	Fund manager has written to companies about issues of concerns or has arranged special meetings with them during the last 12 months
fundgov14	Fund manager released press briefings and statements during the last 12 months
fundgov15	Fund manager proposed CSR related resolution during the last 12 months
fully	Fund manager fully performs environmental and social analysis
outsourced	Specialized companies perform environmental and social analysis (ex. Vigeo, EIRIS...)

Table 10: Fund governance criteria correlation table

This table reports the covariance between the different fund governance criteria.

	fundgov2	fundgov3	fundgov4	fundgov5	fully	outsourced	fundgov9	fundgov10	fundgov11	fundgov12	fundgov13	fundgov14	fundgov15
fundgov2	1.00												
fundgov3	0.61	1.00											
fundgov4	0.49	0.45	1.00										
fundgov5	0.51	0.61	0.81	1.00									
fully	-0.01	-0.03	0.08	0.18	1.00								
outsourced	-0.26	-0.18	-0.41	-0.39	-0.44	1.00							
fundgov9	0.09	0.21	0.08	0.18	0.00	-0.07	1.00						
fundgov10	0.26	0.31	0.36	0.43	0.04	-0.12	0.40	1.00					
fundgov11	0.29	0.24	0.40	0.43	0.19	-0.60	0.36	0.22	1.00				
fundgov12	0.43	0.55	0.45	0.51	0.04	-0.21	0.39	0.57	0.34	1.00			
fundgov13	0.23	0.47	0.34	0.35	0.11	-0.49	0.28	0.27	0.44	0.58	1.00		
fundgov14	0.36	0.42	0.36	0.41	-0.02	-0.38	0.30	0.15	0.52	0.57	0.55	1.00	
fundgov15	0.05	0.05	0.16	0.18	0.13	-0.26	0.26	0.16	0.30	0.19	0.35	0.44	1.00

Note: fundgov2= Fund provides information about changes in its portfolio, explaining why companies have been admitted/excluded
fundgov3= Fund discloses sources and methods used to acquire information about the degree of sustainability
fundgov4= Fund provides clients with details of SRI criteria used to select its portfolio
fundgov5= Fund informs clients about changes in SRI criteria
fundgov9= Companies are regularly informed about the fund's decisions
fundgov10= Ethical/Socio-environmental profiles sent to screened companies
fundgov11= Fund manager/analysts include Corporate Social Responsibility (CSR) issues in routine meetings
fundgov12= Fund manager has written to companies about issues of concerns during the last 12 months
fundgov13= Fund manager has arranged special meetings with companies during the last 12 months
fundgov14= Fund manager released press briefings and statements during the last 12 months
fundgov15= Fund manager proposed CSR related resolution during the last 12 months
fully= Fund manager fully performs environmental and social analysis
partly= Fund manager partly performs environmental and social analysis
outsourced= Specialized companies performs environmental and social analysis (ex. Vigeo, EIRIS...)

Table 11: The impact of the fund governance on financial performance, 2nd model

Table 11 reports the estimates of determinants of European SRI mutual funds' risk-adjusted return (see Eq. (4)). The dependent variable is the risk-adjusted return of fund i over the different years of the sample period.
(D) denotes dummy variables. p values are given in parenthesis. *, **, and *** indicate significance level of 10%, 5%, and 1%, respectively.

	RAP 2010	RAP 2009	RAP 2008	RAP 2007	RAP 2006
Tenure	-0.355*	-0.189	-0.265	-0.258	-0.132
	(.057)	(.215)	(.314)	(.466)	(.498)
Fund size	-0.007	0.00614	0.00424	0.00438	0.00327
	(.136)	(.115)	(.529)	(.642)	(.545)
Europe	0.0342	0.0431*	0.00661	-0.112*	0.138***
	(.295)	(.1)	(.884)	(.08)	(.)
Equity	0.113***	0.129***	0.278***	0.287***	0.293***
	(.003)	(.)	(.)	(.)	(.)
sect_enterprise	0.583***	-0.00972	0.248	-0.235	0.394**
	(.)	(.934)	(.234)	(.399)	(.022)
Fee	73.3	-0.707	284	408	233
	(.562)	(.994)	(.108)	(.144)	(.125)
Small Blend (D)	4.23	-5.85	-17.5	-19.6	-1.46
	(.599)	(.357)	(.115)	(.183)	(.854)
Medium Growth (D)	10.2***	-1.34	-5.05	-3.41	4.75
	(.004)	(.638)	(.311)	(.62)	(.233)
Medium Blend (D)	1.33	-3.15	-8.74*	-1.54	3.02
	(.679)	(.247)	(.067)	(.829)	(.437)
Medium Value (D)	17.3***	3.35	-13.4	-15	
	(.009)	(.515)	(.137)	(.219)	
Large Growth (D)	1.11	-3.8	-1.6	2.31	1.4
	(.705)	(.107)	(.698)	(.696)	(.67)
Large Blend (D)	2.46	-2.7	-9.71***	-4.62	-2.53
	(.267)	(.129)	(.003)	(.287)	(.301)
fundgov2 (D)	1.17	-0.262	7.28**	5.76	0.465
	(.604)	(.888)	(.026)	(.18)	(.848)
fundgov3 (D)	-7.33**	-0.529	-11***	-4.04	-4.7
	(.013)	(.82)	(.008)	(.45)	(.113)
fundgov4_5 (D)	5.59***	2.96**	5.76**	1.99	4.14**
	(.003)	(.05)	(.031)	(.578)	(.037)
Fully (D)	4.87**	2.67*	5.33*	4.5	6.67***
	(.018)	(.101)	(.059)	(.25)	(.004)
Outsourced (D)	-1.31	-0.0333	3.4	1.69	2.04
	(.621)	(.988)	(.369)	(.745)	(.483)
fundgov9 (D)	7.96***	3.27*	0.385	-3.98	2.45
	(.)	(.066)	(.902)	(.379)	(.351)
fundgov10 (D)	-8.79***	-5.04***	-4.58	-2.56	-7.45***
	(.)	(.009)	(.168)	(.586)	(.006)
fundgov11 (D)	-1.17	-0.252	1.12	-0.927	-2.06
	(.653)	(.912)	(.777)	(.869)	(.512)
fundgov12_13 (D)	-0.0209	0.263	0.176	2.13	1.09
	(.99)	(.836)	(.936)	(.482)	(.515)
fundgov14 (D)	3.22	-0.781	0.149	0.724	2.49
	(.181)	(.69)	(.965)	(.875)	(.325)
fundgov15 (D)	-1.64	-3.94*	-8.05**	-7.53	-4.26
	(.572)	(.09)	(.047)	(.168)	(.172)
Constant (D)	-60.9***	-10.2	-50.5**	-7.67	-78.4***
	(.)	(.357)	(.012)	(.772)	(.)
R^2	0.585	0.487	0.605	0.525	0.711
Adjusted R^2	0.463	0.331	0.484	0.372	0.614
Nb of Obs	102	100	99	95	89
Root MSE	7.56	5.96	10.3	13.7	7.4

Table 12: Hypothesis testing on SRI mutual funds' financial performance

The table reports the following hypothesis testing:
Null hypothesis: the risk adjusted performance mean of funds applying the fund governance criterion does not differ from those which do not apply it
Alternative hypothesis: the risk adjusted performance mean of funds applying the fund governance criterion differs from those which apply it
The table reports the mean estimates of the difference between the risk-adjusted performance of the funds applying the considered criteria and those which do not. p values are given between parentheses.

	RAP2010	**RAP2009**	**RAP2008**	**RAP2007**	**RAP2006**	**Sample Period**	**Crisis Period**
Fundgov4_5[1]	-5.292048	-2.81807	-6.4931	-9.650084	-5.736346	-9.885897	-6.41495
	(0.1015)	(0.2357)	(0.2436)	(0.0418)	(0.1901)	(0.1022)	(0.1029)
Fundgov8[2]	6.543559	3.632579	8.136847	8.068132	6.013171	9.103241	6.996902
	(0.01)	(0.0539)	(0.0388)	(0.0914)	(0.0803)	(0.0446)	(0.0312)

Note: [1] difference=mean(value 2)-mean(value 0)
[2] difference=mean(fully)-mean(outsourced)
Fundgov4_5= Fund provides clients with details of SRI criteria used to select its portfolio and informs them about changes
fully= Fund manager fully performs environmental and social analysis
partly= Fund manager partly performs environmental and social analysis

Table 13: Distribution of the number of screens used by the SRI funds

Table 13 reports the number of funds sending the investee companies their SEE profile in function of the number of SRI screens used to select the portfolio. Are provided between brackets the relative percentage of funds according to the number of SRI screens used. The last column provides the average number of screens used by the funds applying the criterion and those which do not apply it.

Fundgov10	1 to 10 screens		11 to 21 screens		Total	Mean
Yes	13	(21.0%)	49	(79.0%)	(100%)	13.29
No	27	(69.2%)	12	(30.8%)	(100%)	9

Table 14: Impact of the SRI research cost on financial performance

Table 14 reports the estimates of determinants of European SRI mutual funds' risk-adjusted return (see Eq. (4)). The dependent variable is the risk-adjusted return of fund i over the different years of the sample period.
(D) denotes dummy variables. p values are given in parenthesis. *, **, and *** indicate significance level of 10%, 5%, and 1%, respectively.

	Crisis Period (1)	Crisis Period (2)	Sample Period (1)	Sample Period (2)
Tenure		-0.263		-1.25
		(.195)		(.055)
Ln(tenure)	-2.36		-11	
	(.034)		(.008)	
Fund size		0.00515		-0.00864
		(.342)		(.623)
Ln(fund size)	1.48		0.764	
	(.072)		(.807)	
Fee	308	285	801	1207
	(.205)	(.268)	(.386)	(.145)
Europe (with UK)		-0.0274		0.0408
		(.451)		(.727)
UK	-0.155		-0.0675	
	(.)		(.641)	
Europe (ex. UK)	0.0417		0.0255	
	(.247)		(.849)	
Equity	0.254	0.243	0.58	0.561
	(.)	(.)	(.)	(.)
Sect_enterprise	0.0052	-0.00864	2.09	2.11
	(.969)	(.957)	(.)	(.)
Small Blend (D)	1.07	-16.3	21.2	7
	(.892)	(.057)	(.448)	(.789)
Medium Growth (D)	1.34	-6.01	42	38.5
	(.73)	(.154)	(.005)	(.007)
Medium Blend (D)	1.07	-6.07	17.3	12
	(.784)	(.156)	(.218)	(.37)
Medium Value (D)	-7.82	-11.2	0	0
	(.204)	(.109)	.	.
Large Growth (D)	-1.39	-2.86	20.2	16.2
	(.66)	(.406)	(.111)	(.155)
Large Blend (D)	-3.62	-7.6	8.67	7.65
	(.134)	(.004)	(.342)	(.363)
fundgov2 (D)	2.16	4.4	0.00637	2.39
	(.339)	(.075)	(.999)	(.772)
fundgov3 (D)	-3.14	-5.09	-25.3	-27.8
	(.236)	(.098)	(.015)	(.006)
fundgov4_5 (D)	1.15	2.74	22.2	23.8
	(.516)	(.186)	(.001)	(.)
Fully (D)	4.62	4.34	20.5	20.6
	(.019)	(.055)	(.011)	(.009)
Outsourced (D)	-1.1	2.06	-11.2	-8.62
	(.672)	(.487)	(.238)	(.358)
fundgov9 (D)	-1.56	-0.995	34.3	32.5
	(.501)	(.703)	(.)	(.)
fundgov11 (D)	-2.74	1	-18.5	-12
	(.364)	(.759)	(.109)	(.261)
fundgov12_13 (D)	1.39	0.265	1.28	-0.461
	(.363)	(.879)	(.816)	(.934)
fundgov14 (D)	0.804	0.972	15.1	16.3
	(.726)	(.714)	(.086)	(.061)
fundgov15 (D)	-2.37	-6.97	-18.6	-22.1

	(.391)	(.027)	(.075)	(.033)
Fee x Fungov10	-40.6	3.57	-2835	-2484
	(.855)	(.989)	(.001)	(.003)
$(\text{Fee x Fungov10})^2$	-2837	-3115	42427	30563
	(.669)	(.679)	(.086)	(.203)
Constant	-26.8	-22.2	-234	-256
	(.047)	(.159)	(.)	(.)
R^2	0.761	0.649	0.723	0.691
R^2 adjusted	0.67	0.529	0.61	0.578
Nb. of Obs.	92	95	84	87
Root MSE	6.63	7.82	23.4	24

Figure 6: Effect of the SRI involvement cost on the financial performance

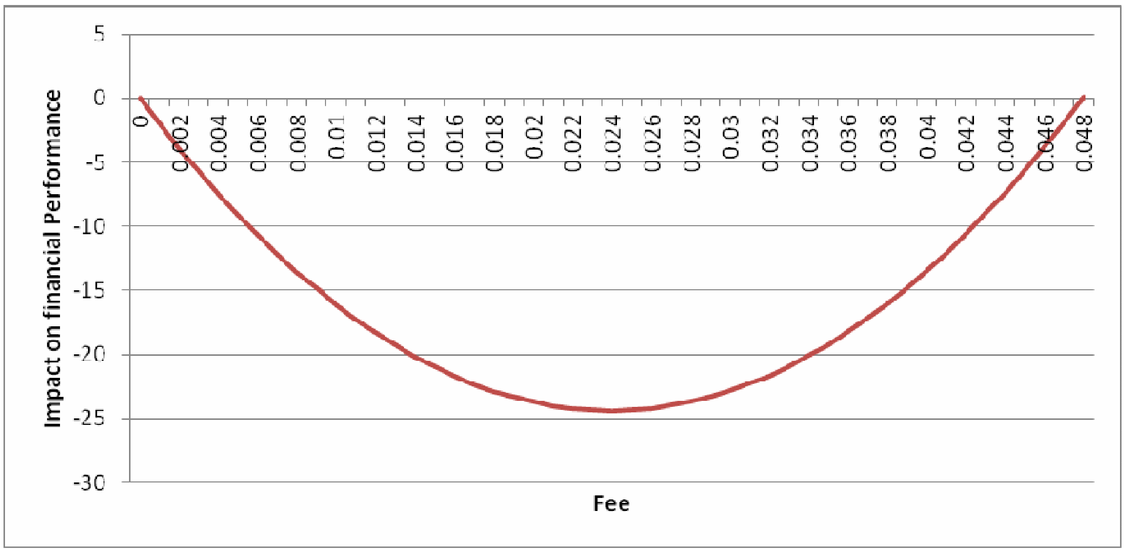

Table 15: Impact of the SRI fund governance on fund attractiveness, flow 2009

Table 15 reports the estimates of determinants of the growth rate of the fund size beyond assets appreciation (see Eq. (10)) for European SRI mutual funds over the year 2009. The dependent variable is the flow of fund i over 2009, i.e. the variation in percentage of its fund size due to money inflow or outflow. K corresponds to the duration on which the cumulative past fund return has been calculated. The estimates in the three last columns are the between estimators.
(D) denotes dummy variables. p values are given in parenthesis. *, **, and *** indicate significance level of 10%, 5%, and 1%, respectively.

Flow 2009	K=3	K=6	K=12	K=3 Be	K=6 Be	K=12 Be
Fund return	-0.471	-0.147	0.238	-0.307	0.32	0.145
	(.265)	(.555)	(.664)	(.913)	(.827)	(.958)
Fund return^2	1.62	0.938	0.895	-14.3	-1.06	-2.64
	(.446)	(.25)	(.325)	(.212)	(.783)	(.549)
Ln(tenure)	-0.00683	-0.00288	-0.00167	0.00525	-0.0108	-0.0331
	(.938)	(.974)	(.985)	(.95)	(.901)	(.708)
Ln(fund age)	0.142	0.141	0.143	0.193	0.164	0.177
	(.496)	(.499)	(.494)	(.336)	(.42)	(.376)
Ln(fund size)	0.0266	0.0277	0.0259	0.0214	0.0252	0.0277
	(.67)	(.658)	(.678)	(.715)	(.672)	(.636)
Small Blend (D)	-0.0944	-0.0988	-0.107	-0.0859	-0.093	-0.0481
	(.879)	(.873)	(.863)	(.885)	(.877)	(.936)
Medium Growth (D)	0.0933	0.0952	0.0935	0.0993	0.0803	0.0892
	(.748)	(.743)	(.748)	(.714)	(.769)	(.744)
Medium Blend (D)	0.0702	0.0749	0.0688	0.114	0.0776	0.112
	(.804)	(.791)	(.808)	(.667)	(.773)	(.676)
Medium Value (D)	0.247	0.24	0.255	0.29	0.252	0.242
	(.621)	(.63)	(.609)	(.534)	(.592)	(.603)
Large Growth (D)	0.08	0.0828	0.0868	0.085	0.0839	0.0874
	(.753)	(.745)	(.733)	(.724)	(.732)	(.721)
Large Blend	0.226	0.228	0.229	0.215	0.21	0.198
	(.224)	(.22)	(.217)	(.218)	(.237)	(.262)
Fee	3.13	2.67	3.03	3.14	3.55	3.87
	(.745)	(.782)	(.753)	(.727)	(.7)	(.671)
sect_enterprise	0.0000648	0.00026	0.000475	0.00275	0.000889	0.000659
	(.995)	(.981)	(.965)	(.793)	(.932)	(.949)
UK	0.00377	0.00367	0.00373	0.00296	0.00364	0.00359
	(.22)	(.232)	(.225)	(.317)	(.221)	(.222)
Europe (ex UK)	-0.000981	-0.00102	-0.00103	-0.00123	-0.000945	-0.000793
	(.734)	(.723)	(.721)	(.653)	(.732)	(.773)
Equity	0.000818	0.000915	0.000934	0.00164	0.000987	0.00102
	(.784)	(.758)	(.754)	(.564)	(.724)	(.713)
Env	0.0559	0.0559	0.0569	0.0393	0.0528	0.0499
	(.507)	(.506)	(.499)	(.622)	(.508)	(.528)
Soc	-0.0242	-0.0266	-0.0242	-0.0195	-0.0195	-0.0197
	(.643)	(.611)	(.643)	(.695)	(.704)	(.694)
Gov	-0.0957	-0.0945	-0.0938	-0.0841	-0.092	-0.0933
	(.4)	(.405)	(.409)	(.437)	(.401)	(.388)
Cbi	-0.0285	-0.0287	-0.0289	-0.0323	-0.0292	-0.0305
	(.313)	(.309)	(.306)	(.228)	(.277)	(.254)

fundgov2 (D)	-0.0927	-0.0948	-0.0899	-0.135	-0.0991	-0.125
	(.598)	(.589)	(.609)	(.422)	(.552)	(.459)
fundgov3 (D)	0.5**	0.496**	0.492**	0.493**	0.506**	0.538**
	(.023)	(.024)	(.025)	(.021)	(.02)	(.014)
fundgov4_5 (D)	-0.215	-0.221	-0.217	-0.234	-0.214	-0.212
	(.16)	(.149)	(.157)	(.103)	(.144)	(.14)
Fully (D)	-0.012	-0.0214	-0.0145	-0.0398	-0.000717	-0.00689
	(.943)	(.899)	(.932)	(.801)	(.996)	(.965)
Outsourced (D)	0.0843	0.0823	0.0821	0.0309	0.0684	0.0496
	(.697)	(.704)	(.705)	(.881)	(.741)	(.81)
fundgov9 (D)	0.1	0.0956	0.105	0.0975	0.101	0.0913
	(.539)	(.559)	(.521)	(.525)	(.521)	(.558)
fundgov10 (D)	-0.133	-0.124	-0.131	-0.0984	-0.122	-0.108
	(.463)	(.493)	(.469)	(.57)	(.483)	(.533)
fundgov11 (D)	-0.121	-0.115	-0.119	-0.123	-0.138	-0.151
	(.581)	(.599)	(.587)	(.556)	(.516)	(.474)
fundgov12_13 (D)	0.0193	0.021	0.0193	-0.00115	0.0105	0.00175
	(.876)	(.865)	(.876)	(.992)	(.929)	(.988)
fundgov14 (D)	-0.0782	-0.0777	-0.0817	-0.0455	-0.0681	-0.0524
	(.682)	(.684)	(.669)	(.8)	(.706)	(.771)
fundgov15 (D)	-0.0182	-0.0157	-0.0154	0.0857	0.0164	0.0511
	(.94)	(.948)	(.949)	(.719)	(.943)	(.825)
Constant	-0.26	-0.308	-0.349	-0.282	-0.276	0.147
	(.81)	(.776)	(.747)	(.78)	(.787)	(.896)
R^2	0.311	0.311	0.31	0.331	0.317	0.327