

## Mälardalen University

This is an accepted version of a paper published in *Progress in Industrial Ecology, An International Journal*. This paper has been peer-reviewed but does not include the final publisher proof-corrections or journal pagination.

Citation for the published paper:

Cerin, P., Dobers, P. (2008)

"The contribution of sustainable investments to sustainable development"

*Progress in Industrial Ecology, An International Journal*, 5(3): 161-179

URL: <http://dx.doi.org/10.1504/PIE.2008.019129>

Access to the published version may require subscription.

Permanent link to this version:

<http://urn.kb.se/resolve?urn=urn:nbn:se:mdh:diva-4530>

DiVA 

<http://mdh.diva-portal.org>

# The Contribution of Sustainable Investments to Sustainable Development

*Article published in Progress in Industrial Ecology. Volume 5, issue 3, pp. 161-180.*

Pontus Cerin, Associate Professor, (pontus.cerin@usbe.umu.se)  
Umeå School of Business, Umeå University  
and IVL Swedish Environmental Research Institute

and

Peter Dobers, Professor (peter.dobers@mdh.se)  
School of Sustainable Development of Society and Technology, Mälardalen University

## The Central Role of Financial Markets and Institutional Investors

Financial markets play a pivotal role in our economy in that the allocation of resources through these markets determines, to a significant degree, the development of our society. The way we invest today has an effect on the way society will function and produce in the future. Even a small shift in the behaviour of the actors on the financial markets can have significant consequences on other sectors of society, ranging from company operations at the micro level, to the trends and developments in the international economy at the macro level. Recent trends including globalisation, outsourcing, short-term financial gains and so forth has led some to question the ethics and sustainability of existing business models and practices.

The vital role that the financial sector plays in the economy has resulted in an increased interest and awareness in the role of the financial sector in sustainable studies and practice. It is clear that the financial sector can both hinder and catalyse a move towards a more sustainable society. Banks, investment funds, pension funds, insurance corporations, among others clearly have a role to play in the promotion of sustainable development.

Institutional investors such as pension funds and life insurers have rapidly become one of the most important groups in the financial sector. Around 15 % of the equity of all listed companies globally is held by institutional investors, and in the EU that share is even higher (Monks, 2001). National pension funds in particular could play an

important role in supporting the development of social and environmental investments. In most developed countries pension funds alone constitute the most important group of shareholders in quoted companies. In the UK these investments corresponds to 35% of all publicly quoted companies (Sparkes, 2002). Other examples of influential Institutional Investors are the pension funds for public employees in California, for public employees in the Netherlands and the Norwegian Petroleum Fund (Crane and Matten, 2004). Individually, these institutional investors, among other, have the power to influence company management and to bring social and environmental issues to the fore.

Coalitions of institutional investors have the potential to leverage more influence over the economy. Recently, Governmental Pension Funds have awakened regarding the responsible investment phenomena. The newly established Swedish governmental AP-funds have a high visibility and volume of the pension funds, making them suitable for SI research. The total capital assets of buffer fund AP funds 1-4 was about € 85 billion end of 2006. These funds account for about one third of total pension fund sources besides occupational pension insurance and private pension savings and, moreover,, corresponding to a fifth of the value of the Stockholm Stock Exchange which as of Q1 2008 approximately totalled € 400 billions (DN, 2008). This example, and there are other such examples in most developed economies, provides an indication of the potential power of institutional investors when they agree to collaborate on specific matters. This power could serve to drive change around social and environmental issues and serve as a catalyst for the further integration of sustainability issues in corporate behaviour.

Institutional investors have not realised their potential to steer the economy towards a more sustainable path. Institutional investors are a powerful group that, in many cases, has the mandate to consider and promote sustainability issues. However, for the most part, they have had relatively little to do with sustainable development. One of the primary reasons we face this problem is that sustainable investments are currently a niche market. For example in Sweden, environmentally or socially profiled funds amount to 37 billion SEK or 5,0% of the total Swedish fund savings (Skillius, 2003). This makes any potential benefits to sustainable development marginal. A second reason is that current investor practice, even among those within the Sustainable

Investment community, are not necessarily in line with the long-term interests of society. Enabling investors to effectively integrate sustainability issues into financial decisions is an area where there is a lack of capacity.

Although important, private pension funds do not play as an important role of the Swedish economy and the financial market as in the OECD average. In Anglo-Saxon countries e.g. the assets of private pension funds ranges from a good 50% to 100% of GDP – in the Netherlands and Switzerland even exceeding 100% – (OECD, 2002) and, hence, constitute a lynch-pin in OECD economies for steering the major investment flows. Since these private pension funds assets constituted some \$9 trillion as of 2001 within OECD they are the key to achieving improvements in how resources are used in society, globally. By 2003 these assets had grown to \$15 trillion and represents over 80% of OECD area's GDP (OECD, 2006) and their percentage compared to the OECD area's GDP is growing fast. Actors in this segment have also been taken the lead in responsible investments and corporate engagement such as the pension scheme of British Telecom whose fund manager, Hermes, has become influential by managing investments for some 209 clients and some \$90 billion of assets under stewardship. Some of the customers are Governmental Pension Funds, which raised special concerns and considerations when for instance a governmental body has outsourced its how to invest ethically and its engagement practices to a private actor. It is vital for the mainstreaming of responsible investments to increase the understanding how these pension funds act and influence the investment community as a whole, both concerning investments and corporate governance.

The complex interaction of ecological, social and financial systems makes the development of this capacity an enormous challenge. A well functioning market economy, where actors are well informed and rational, should theoretically help allocate capital in such a way that enables sustainable development. In reality, the relationships between actors, the tools and techniques at their disposal, information asymmetries, and so forth, cloud the picture, misallocate resources and present barriers that hinder sustainable development. Unless the capacity to link sustainable development to the optimal allocation of capital in economic terms is acquired, the interdependence of economic, social and environmental issues will impose long term costs. On the one hand, society will only produce and consume in a sustainable way if capital is allocated

in a sustainable way. On the other hand, the long-run return on capital depends on society being sustainable.

## Sustainable Investments and the Finance Sector

So far we have established that the financial sector plays a key role in the international struggle towards sustainable development by steering today's but also tomorrow's resource usage. Increasingly, initiatives are taken by actors in the financial community to not only regard the traditional view on the fiduciary responsibility of investors, but also to incorporate wider concerns of ethical, social and environmental character.

Sustainable investments, among numerous denominations, are investments that combine the investors' financial needs and the investments' societal and environmental impacts. This investment segment has grown to a non-negligible size during the last decade and has found many advocates within as well as outside the investment community such as academics, analysts, investors, NGO's and fund trustees. Currently, the UN initiative for responsible investments PRI, established in 2006, has already gathered signatories with a total USD 13 trillion under asset management. The common promotion of sustainable investments is by merely stressing their financial performance in comparison to mainstream investments, neglecting to emphasise the environmental and social performance of such investments.

A contributing factor for this may be due to the difficulties for companies to extract quantifiable data, despite existing reporting and assessment initiatives. Another issue obstructing a clear view on the societal contribution of sustainable investments is the fundamental question of who is to decide what is ethical and sustainable. To what degree are ethical considerations of institutional and mutual funds coherent with the views of investors and society in general?

The main objective of this special issue has been to survey the phenomenon of sustainable investments today, detecting and discussing present opportunities and obstacles, and importantly, to find roads for improvements, enhancing the imperative role that sustainable investments can play in financing operations that lead to improved environmental and social performances in concert with a thriving economy.

## Previous Studies on Sustainable Investments

Studies on sustainable investments can be divided into two main sections: those that explore the link between financial and sustainability performances, and those that explore other dimensions, such as rating criteria of sustainable investments or the effect of sustainable investments on corporate sustainability work. The link between environmental, social or ethical questions on the one hand and finance on the other hand has been researched for many years now. Early research focussed on how investors consider or “should” consider ethical, environmental and/or social aspects in their investments (Bruyn 1987; Preston 1982; Simon et al. 1972). This research was very much driven by the practice of or demand for ethical investments and often focussed on particular issues (e.g. apartheid, child labour, gambling). Further, and related to the former research, the question of whether consideration of non-financial aspects in investments is linked to a lower financial investment performance has been researched for quite some time (e.g. Alexander & Buchholtz 1978; Dowell et al. 2000; Grossman & Sharpe 1986; Hamilton et al. 1993; McWilliams & Siegel 1999; Moskowitz 1972; Russo & Fouts 1997). It is especially this second research field that continues to capture much attention. This is due to the importance of this question for the future of sustainable investments. If there is no conflict between the environmental, social or ethical degree of a portfolio and its financial performance, then investors will not be financially penalised for considering environmental, social and/or ethical aspects in their financial decision making. We can assume that this is a condition sine qua non for a widespread adoption of sustainable investment by mainstream investors.

We can distinguish between two types of arguments in this context (Kurtz 1997):

1. sustainable investments will have a neutral or negative effect on returns.
2. sustainable investments may have a positive effect on returns.

The first type of arguments is based on established financial theory and the assumption that markets are efficient (on market efficiency see Fama 1970). If markets are efficient<sup>1</sup>, i.e. all information is incorporated in the prices of the securities, then it will

---

<sup>1</sup> We do not distinguish between different degrees of market efficiency.

not be possible to achieve an excess return, i.e. investors will not be able to “beat the market” through stock picking. Furthermore, any investor who restricts his/her investment universe by excluding securities (for example through sustainable investment screens) will increase portfolio risk and thus lower the risk-adjusted return of his/her portfolio. Based on established financial theory and under the assumption that markets are efficient, sustainable investment portfolios would thus under-perform. This has implications for our research, since the reasoning around market efficiency points to why conventional decision-makers in the financial markets find it difficult to believe in a “sustainability advantage” of sustainable investments, and therefore may bring light on impediments to the mainstreaming of sustainable investments. Further, as more mainstream investors do become interested in sustainable investments, the arguments based on market efficiency and diversification has implications for portfolio construction. Mainstream investors, and this holds true for institutional investors in particular, will experience any deviation from market portfolios as a risk (tracking error). As a consequence there is substantial pressure to bring sustainable investment portfolios more in line with conventional portfolios. This can have a negative impact on the environmental, social or ethical characteristics of the portfolios. Put simply, there is a risk that these portfolios become “less green”.

The second type of arguments points to sustainable companies being better investments than non-sustainable companies. There are a great number of studies that aim to show that a “sustainability advantage” can be exploited for the benefit of investors. For instance lower environmental costs, lower environmental risks or better employee relations are given as examples of positive sustainability factors not fully taken into account by investors. High quality analysis on those areas would thus enable the investors to increase returns.

Current evidence is not conclusive, i.e. there are studies that support both arguments. To adherents of the arguments on market efficiency, this does not come as a surprise as in efficient markets any “sustainability advantage” would immediately be priced in and could thus not be used any more in the future. The sustainability advantage argument has implications for our research, since those who believe in a “sustainability advantage” of sustainable investments are willing to adopt active investment styles to exploit this advantage. As a consequence they are able to construct portfolios with

pronounced environmental, social and/or ethical characteristics. Investors that follow a very active sustainable investment style can invest in “dark green” portfolios. Investment styles that are “less active” or even passive will result in portfolios that resemble conventional portfolios.

As long as sustainable investment was only practised by investors who believed in a sustainability advantage and that were ready to adopt an active sustainable investment style accordingly there was no compelling reason to question the degree of sustainability of the resulting investment portfolios. In the past, research could thus work with rather simple proxies for sustainable performance of companies. Examples are South-Africa free portfolios (Grossman & Sharpe 1986; Teoh et al. 1999) or percentage of women in management (Shrader et al. 1997). Investors that experience any deviation from the market portfolio as a risk will invest in portfolios that are difficult to distinguish from conventional portfolios. As a result it becomes more difficult to determine the contribution that sustainable investment investors are making to sustainable development.

Compared with studies on financial performance, there are fewer studies on investments’ contribution to sustainable development (which was one ambition of this special issue), on the effects on corporate behaviour of different sustainable investment methodologies, and other aspects of sustainable investments that do not primarily seek to explain financial particulars. The potential trade-off between relative investment risk on the one hand (as per the above) and contribution to sustainability on the other hand can only be discussed and managed, if the contribution of a portfolio to sustainability can be established. Future research must build on and integrate existing research in this field aiming to contribute to a wider consensus on the measurement of the sustainable performance of investment portfolios.

Existing literature and research show a multitude of different approaches and sets of assessment criteria (e.g. Carlsson Reich et al, 2001; Dillenburger et al. 2003; Figge 1995, 2000; Goetz & Czymmek 2002; Hughes et al. 2001; Ilinitich et al. 1998; Jung et al. 2001; Åhman et al, 2003). While the methodological concepts such as shareholder engagement and portfolio screening are well documented, the next step, i.e. to follow up on the effects of these methods, is less researched. This is most probably due to the

methodological challenges it poses. One (albeit not the only) exception is O'Rourke, who finds that the main impact is improved disclosure of social and environmental issues by corporations. She also concludes that "*Material social and environmental performance by the firms is yet to be traced to SRIs, or properly measured.*" (O'Rourke, 2003:2)

In the last decade there has been a surge of new sustainable investment mutual funds and indices (SiRi Company, 2004; Sjöström, 2004). This has spurred critical research on their compositions, including ratings (e.g Koellner et al, 2005; SustainAbility, 2004; Figge & Schaltegger 2000a). Cerin and Dobers (2001a) found that other factors than sustainability (e.g. market capital size and back casting methodology) explained the Dow Jones Sustainability Group Index (DJSGI) out performance of Dow Jones Global Index (DJGI). The likely reason is the fact that DJSGI has selected its components mainly on the basis of information from the companies themselves (Cerin & Dobers, 2001b). Illnitch *et al.* (1998) evaluated environmental ratings and found them to rely on public reactions rather than on precise and measurable outcomes. Instead the subjectivity in their formulations may raise a dangerous circularity where the rankings are based on reputation and the reputation is partly based on the ranking. Hawken and the Natural Capital Institute (2004) have, moreover, detected that almost identical constituents have been chosen (as of Oct. 2003) in the combined portfolio holdings of American SI mutual funds as of the 30 largest market capitalisation size firms composing the Dow Jones Industrial Average. The tendency for ratings to be based on companies' own information is supported by a recent PhD Thesis (Louche, 2004), some researchers (Cerin & Dobers, 2001a, Louche, 2004), however, also conclude that sustainability indices have indeed contributed to making sustainable investments a viable commercial project and transformed sustainable investments to a an element of the broader Corporate Social Responsibility field.

**Sustainable investments expanding into the mainstream investment community**  
Since the first investments that took responsibility for perceived non-financial issues such as ethics, society and the environment there has also been a development in terminology which at times can be related to the different aims of the different

investments styles that answered to a political debate and public opinions of the time. Sometimes these different terminologies may be applied as equivalent terms, but are at times used differently and may be terms that are replacing each other (cf. Sparkes' distinctions and similarities of ethical investments and socially responsible investments, 2001).

Ethical investments are often associated with the notion of avoiding certain companies and industries from their investment universe. The first ethical fund was established in 1928 in the USA when temperance advocates steered their investments away from companies involved with alcohol or tobacco. Being on the responsible investment frontier they named their fund the Pioneer Fund. Funds and investments taking ethical issues into account, however, remained a very marginal phenomenon until the 1960's when a more modern version of responsible investments emerged as an answer to the public growing resistance towards the Vietnam War. This inspired many Churches and Universities in the USA to exclude companies that supply munitions and ammunition to the US forces at war. After the Vietnam War the attention on ethical considerations in investments was turned towards South Africa in an attempt to cut off the credits to the country and the apartheid regime. One of Europe's first ethical funds was established in 1980 by Swedbank Robur in joint venture with the Church of Sweden avoided stocks in such companies (Kreander, 2001, Sparkes, 2002).

The next issue that received public attention was the environment, partly due to Rachel Carson's book *Silent Spring* (1962) that attracted a lot of attention concerning also a human vulnerability to the uncontrolled use of pesticides. Together with the Club of Rome report on *The Limits to Growth* (Meadows *et al.*, 1972) which served as a hallmark in the budding of the environmental economics field. Real and severe environmental incidents in the 1970's and 1980's such as Seveso, Harrisburg, Chernobyl, Bhopal, Exxon Valdez as well as the extensive forest deaths in central Europe – have made the public well aware about environmental aspects which oftentimes were linked to corporate action. The growing environmental consciousness in society lead to the first environmental retail funds in 1988 which were established in England by Merlin/Juniper with the Ecology Fund and in Sweden by Carlson that developed the Världsnaturfonden – WWF Fund (Kreander, 2001).

The attention in contemporary public debate and in academic writings on sustainable investments has been on making *visible* the top of the iceberg that is perceptible above the water surface while the lion part of sustainable investments consists of what has traditionally been *hidden* below the surface which is the institutional side of sustainable investments such as pension funds, insurances, investment companies & banks and charitable trusts. This asymmetry in attention and potentials in bringing about a change in how fiscal resources are invested has to be highlighted (Sparkes, 2002; cf. Mistra, 2001). As Sparkes notice, influencing the mainstream actors within institutional investments will accomplish a radical change in steering society's future resources since, in most highly developed economies, pension funds constitute the most powerful shareholder group in listed companies, owning approximately 35% of all UK publicly quoted companies (Sparkes, 2002).

In 2005 an initiative was set up by the United Nations Secretary General with a group of the world's largest institutional investors to develop Principles for Responsible Investments (PRI). The development process of the UN PRI was, moreover, supported by a multi-stakeholder group consisting of some 70 agents. The principles were then launched in January 2006. The UN PRI has quickly gained momentum and has attracted signatories from the financial community – including asset owners, investment managers and service partners (Walter and Sisli, 2006). The combined assets under their management and, hence, assets influenced by United Nations Principles for Responsible Investments is currently USD 13 trillion (UN PRI, 2008, cf. Walter and Sisli, 2006). This constitutes a considerable share of the total equity market capitalization for the world which totalled around USD 43 trillion in early 2007. The world equity capitalisation on USD 43 trillion was at the time equivalent to 88% of world's GDP. Consequently, the size of the assets signed up to adhere to UN's principles for responsible investments corresponds to 15% of today's world GDP has great potentials to influence tomorrow's resource use towards a more sustainable future. Essential for reaching this route is how the implementation of these principles is comprehended and to what extent the principles move from voluntary and aspirational when signing up to becoming an instrument where non-compliance at PRI progress surveys will become risky business for signatories.

Even though we can indicate a historical evolution of these investments that take social or environmental or both issues into account from the paragraphs above, including a sense of incoherence when using the different terms for the investments that go further than just the plain short-term financial aspects. The prominent ethical investment advisor organisation, EIRIS (2008), e.g. provides its view on what ethical and socially responsible investments are and it concludes with an interchangeable usage of the terms:

“Ethical or socially responsible investment (as well as responsible and sustainable investment) are terms used to describe any area of the financial sector where the social, environmental and ethical principles of the investor (whether an individual or institution) influence which organisation or venture they choose to place their money with. It also encompasses how an investor might use their power as a shareholder to encourage better environmental and social behaviour from the companies they invest in.”

EIRIS also explains that ethical and socially responsible investments are terms that they use “...not just to refer to screening equities for investment but also to describe engagement with companies, banking, investment in debt instruments and “cause-based investments” in enterprises with social, environmental or ethical objectives.” An example on how to differ the term socially responsible investments (SRI) from extra-financial research can be retrieved in Thomson Extel and UKSIF (2008) survey:

“For the Survey this year, in consultation with UKSIF and the market, we specifically broadened the scope beyond SRI to include ‘Extra-Financial’. While this has enabled a somewhat wider range of data to be gathered, it has also brought into sharp relief the question of nomenclature. What do you call this – SRI, ESG, SEE, Value-Added, Long-Term Thematic, Corporate Governance? There is no easy, single answer – demonstrating that this is very much an ‘industry’ in transition, and a reflection of the ongoing ‘niche vs. mainstream’ debate. A perennial debate – yes, but the terms of reference are changing...”

The terms of reference and how they are interpreted will change since the development of investments that take social and environmental concerns into account are not mature

yet but to go into a converging phase. The development is still, hence, in the diverging fluid phase (Utterback, 1996) and variants on socially responsible investments appears frequently. One term e.g. used by BelsIF, Dexia, EuroSIF and OECD among others is ‘sustainable and socially responsible investments’. Then, we have the increasingly used term extra-financial which may be interpreted as the aspects dealt with do not have materiality, according to some critiques. The intention is, however, probably to indicate that these are aspects that usually are not considered financial but are in fact material and, thus, possess a financial value that is not yet realised (cf. comments by respondents in Thomson Extel and UKSIF, 2008) and similar discussions on linkage to financial value exist for the terms ethical and sustainable investments.

The development process in voluntary corporate reports has been similar to the development in socially responsible investments where KPMG International in its surveys on voluntary corporate reporting in their last publication (KPMG, 2005) had to come up with an all embracing denomination, calling them corporate responsibility reports. We would suggest that a similar wording to be applied on investments that incorporates concerns for social and or environmental aspects as responsible investments to embrace the various concerned investment denominations.

## Challenges of Sustainable Investments

### *General challenge of Sustainable funds*

The general problem for retail funds specialised to incorporate environmental and social concerns in their selection of stocks stems from the general problem that faces all private investors in funds. It is, namely, difficult for the private consumer – investor – from the outside to analyse the process and selection methodology chosen inside the fund company’s organisation. This problematic “outside-in phenomenon”, where for instance in Sweden only every second private investor knows exactly what funds he or she has invested in, is well described by Anders Ek, CEO of the largest Swedish retail fund company Robur, as “Many fund investors have obtained a composition they are unaware of” (Weilenmann, 2003). In the Nordic fund market most environmental funds increasingly incorporate social considerations (Sveriges Natur, 2004; cf. Hamilton, 2007) and found that the Swedish mutual fund market contains several funds labelled environmental, but the selection criteria encompassed ethical and social aspects as well.

Cerin and Dobers (2001b) found that it is essential to start more thorough research into analysing the analysis of environmental and social aspects, since too little was and still is known about the analysts' research processes. As shown in the paper Dow Jones Sustainability Index applied in its beginning a sustainability definition that may not be concurrent with most definitions and most views on sustainability.

These evaluation systems are, moreover, commonly developed by practitioners i.e. consultants, banks, governments, NGO's et cetera to primarily serve these stakeholders' own use of rating and benchmarking (Kolk and Mauser, 2002). Ilnitch et al. (1998) has found that this phenomenon may "give rise to dangerous circularity, whereby rankings are based partly upon reputation and reputation is based partly upon rankings". Cerin and Dobers (2001a) notice that companies with larger market capitalisation values are better rated in sustainability indexes (such as Dow Jones') and thus included to a higher degree. The size bias along with industry asymmetries explained the superior growth of the sustainable index (DJSI) compared to its benchmark and not the applied sustainability criteria. This and the other biases found were later on confirmed by Deutsche Bank Equity Research (Deutsche Bank, 2002).

So, it is hard for private investors to know the selection process of companies engaging in environmental and social issues, but as shown above Hawken and the Natural Capital Institute (2004) detected that the combined holdings of mutual funds taking environmental and social consideration into account had almost identical selection of firms as the 30 largest capitalisation size firms in the Dow Jones Industrial Average. The funds have often quite similar choice of components despite having different selection criteria and issues of concern. The similarities in equity holdings of mainstream funds and ethical funds of different environmental and social foci have also been detected in Sweden (Skillius, 2002; Hamilton, 2007) and the overweight towards large cap firms can be seen in corporate reporting on environmental and social issues both internationally (e.g. the Fortune lists) and in Sweden on the OM Stockholm Exchange (Patten (1991) Stray and Ballantine (2000) Cerin, 2002; cf. Kolk and van Tulder, 2004).

In Sweden the most widespread way of performing the selection criteria of companies is through negative norm based screening, sometimes combined with an element of

charity by giving away a portion of the fund income – the fund management fee (Säve-Söderbergh, 2005). The 2006 European SRI Study, by Eurosif, shows that on a European level the simple exclusions – e.g. tobacco, norm-based screening and weapons – are still the continuing force in European SRI: “Simple screens continue to be practiced on a large scale” (Eurosif, 2006). Then, when a limited number of companies are avoided through the negative screening, the ordinary mainstream portfolio management succeed working in a similar fashion as mainstream investments are carried out. Swanström and Cerin (2006) detected a considerable gap between the negative screening phase – which may occur outside the fund company itself – and portfolio managers of funds being responsible in handling environmental and social issues. Sustainability – environmental and social – issues are for a financial analyst of an ethical fund somewhat remote since as a fund managers of ethical funds in the study be Swanström and Cerin (2006) explained that “We do not conduct any analysis ourselves on these matters. The Company [anonymous by authors] makes the analysis... We do not look for companies that are pro-active on environmental and social issues. We receive a list on which companies that are okay. Those not included are not invested in. In our own financial analysis we are concerned with revenues and cash flows.”

These, above, illuminated similarities in fund management procedures between traditional mainstream funds and the most common type of environmental funds are quite analogues, especially if focusing on the portfolio manager’s role. The major difference in the management production is that there is an additional step before the traditional fund management where a screening of environmental and/or social issues is applied. This screening process may be in-house or external, but usually detached from the portfolio management. As seen in figure 1 below, the *Fund Identity* of the *Mainstream Fund* and *Environmental Fund* are, hence, similar while the *Fund Image* of these two funds is divergent, leading to a *Perceived Product Portfolio Width* which is essential when attracting new and larger set of customers.

Hamilton (2007) has identified a rapidly growing interest for cleantech as well as in investing into cleantech, but also a lack in available cleantech funds on the Swedish retail fund market and, consequently, asks why this is. Why have these funds made the retail market? What obstacles exist? At the time of the study, as of Q3:2007, the cleantech funds were significantly less in numbers and smaller in capital than

environmental funds. Moreover, the cleantech products on the Swedish market belong to investment companies that have a niche role in the Swedish retail fund market.

Establishing a cleantech fund or environmental technology fund<sup>2</sup> will force the fund company to adopt a different method for the asset management of that particular fund. The individual stocks to invest in are much smaller in market capitalisation size and the smaller firms are likely to not be listed. Besides the new increased demands on information gathering the asset management companies and their funds cannot own large shares of the capital stock of an individual company which effectively reduces the establishment of a larger fund to be based on a small country cleantech companies. Therefore, many cleantech funds in Northern Europe have to encompass a regional or a global delimitation instead of a national.

By establishing a cleantech fund you will, consequently, expose yourself as a fund company to increased cost for information handling in the pursuit to select firms (cf. Figure 1). So, the *Management of Production* is quite different from the *Mainstream Fund* and *Environmental Fund* procedures which comes down to extra asset management costs. On the *Fund Image* side the cleantech or environmental fund appears similar to the *Environmental Fund* – as described by Weilenmann (2003) do many private investors into retail funds not really know what they have invested in – which results in small or no *Perceived Extension of Product Portfolio Width* and, hence, little contribution to extra attractiveness for the common private investor.

Having only small extra attractiveness benefits from the cleantech fund but different and more resource consuming methods of managing the assets than the asset management companies will find the environmental fund alternative more appealing.

An interesting observation here is that the similar fund *image* of environmental and cleantech funds can be described in the concept of isomorphism (DiMaggio and Powell 1991), or the tendency that offers on a market, or the way that actors organise and

---

<sup>2</sup> Cleantech is partly a new denomination to an already existing phenomenon which is denominated environmental technology. Sometimes these expressions are used interchangeable and sometime not. A Swedish state owned organisation for promoting Swedish environmental technology exports uses the European ETAP definition on environmental technology as their definition on cleantech (cf. Cerin *et al.*, 2007). Claims for how cleantech differs from environmental technology is available at [www.cleantech.com](http://www.cleantech.com).

respond to external pressures. DiMaggio and Powell (1991) refer to mimetic isomorphism when organizations imitate other organizations that appear more legitimate or successful in their business. These funds appear similar, although the fund *identity* is quite different, as described above. However, when comparing the mainstream and environmental funds – appearing quite different to each other – we find that their fund identity, their structure and included investments, are similar to each, corresponding more closely to the concept of *automorphism* (Schwartz forthcoming).

### Articles of This Special Issue

While most papers of this special issue are empirical, we have also included a conceptual paper on socially responsible investments. In her article “Socially responsible investments and avoidance of controversial sectors: On isomorphic processes and the quest for legitimacy” Emma Sjöström discusses socially responsible investments and how it is growing substantially over the last twenty years. While still being marginal in terms of the overall volume of the financial market, the demand in society for these investment alternatives increase and financial players are keen on developing methods and instruments for social responsible investments. One popular but controversial method is negative or avoidance screening, meaning that investment actors withdraw, or do not undertake, their investments in firms that do not live up to certain sustainability criteria. This method is not the least controversial because it lacks bargaining power, once investment institutions have pulled out. So why is this method still so popular? Sjöström presents seven propositions for why negative screening is widely employed, and does so on the background of the concept of legitimacy which provides us with pragmatic, moral and cognitive norms for why socially responsible investment funds and index providers are stimulated to develop and employ negative screening methods.

In their article “The Janus face of sustainable foreign direct investments” Tomi J. Kallio, Salla Laasonen and Martti Vihanto present an empirical study on sustainable foreign direct investments of two projects of the Finnish paper and pulp industry and their investments in Brazil and Uruguay. While such investments are spurred by incentives of economic growth by producing low-cost, fast growing pulp in Latin America, South-East Asia and China, the authors study how green and responsibility

aspects of the so called sustainable foreign direct investments are evident within the prevailing legal and social institutions. The authors show that being green and responsible in this context does not manifest itself in any greater extent than in foreign direct investment with no outspoken sustainability ambitions and find that companies may find it tempting to work on imageries of sustainable foreign direct investments rather than substantial improvements.

In his article “Exploring environmental information in sell side analysts’ research reports” Henrik Nilsson takes use of 246 financial analysts’ reports from eleven leading investment banks on 33 firms as the empirical base in a content analysis showing how environmental information is actually used by financial analysts when analysing and valuing individual firms. Firms from two industries were identified to represent large firms with a likely high impact on the environment; 18 firms came from the oil and gas industries, and 15 from the chemical industry. 17 firms were European and 16 North American. The results show that 35 percent of these research reports contain environmental performance related information, with the chemical industry having about 45% occurrence of environmental information and the oil and gas industry about 27%. There was no difference in the Occurrence of Environmental Information in Research Reports by European and U.S. Investment Banks, but the amount of environmental information disclosed on both North American chemical and oil & gas firms is higher than the amount of environmental information disclosed on European firms. . Nilsson continues his study by describing the amount of such information in these reports and what type of environmental information analysts seem to use.

By using the framework of the Global Reporting Initiative a sample of 100 firms were chosen by Olaf Weber, Thomas Koellner, Dominique Habegger, Henrik Steffensen and Peter Ohnemus to study the relation between sustainability drivers, outcomes and financial performance. The sample of the article “The relation between GRI indicators and the financial performance of firms” was representative for the MSCI World (Morgan Stanley Capital Index), a weighed index of world stocks and their performance constructed by the merchant bank Morgan Stanley. Their results show that investments in firms with solid sustainability performance (as scaled by the Global Reporting Initiative framework) have a positive contribution to sustainable development. Further, the authors show that it pays off financially to be sustainable.

In the final article of this special issue, we find the article “Sustainable Investment Analysis with the Sustainable Value Approach – A Plea and a Methodology to Overcome the Instrumental Bias in Socially Responsible Investment Research” in which Frank Figge and Tobias Hahn present the sustainable value approach and how it may be used for analysing sustainable investments. In a review of current approaches for analysing sustainable investments the authors conclude that they do not integrate the different analyses of financial, environmental and social assessments, and if they do, then they are most often instrumental by superimposing the financial considerations on environmental and social aspects. The sustainable performance of the French firm Danone was assessed and benchmarked against the French national economy by using the sustainable value approach. Both the conceptual presentation and the empirical illustration show that the sustainable value approach, since based on the well-established opportunity cost thinking, perform well when analysing sustainable investments.

Some articles in this special issue seek to understand how sustainable investments can be moved out of its niche and become a more conventional investment practice. The impact on sustainable development is likely to be larger if sustainable investment practice is spread to the broader financial community; this is something we have shed light on with this special issue. The direct social and environmental impact of financial services however is limited; more important is the indirect impact of the sector. What sets financial services apart from most other sectors of the economy is its orientation towards future production and consumption. While other sectors are very much concerned with present exchanges, financial markets act as an intermediary between present investments, returns on capital and productive capacity. These characteristics are no less important in a social-environmental context. Indeed, one of the keystone ideas of sustainable development is its emphasis on inter-generational equity. Present investments determine to a large degree the way society will produce in the future. If investors, for example, invest in energy intensive facilities today, we can expect increased emissions in the future.

Consider sunk costs for example. There are situations where investors today provide economic incentives to companies that can be either detrimental or constructive. Past investments are sunk costs with respect to future decisions. Put differently, future

investments in environmental or social protection will be compared against past (good or bad) decisions that have been made and which costs have already been incurred and cannot be changed. From this point of view, it might be easier to simply follow a destructive or unsustainable path since sunk cost makes it is cheaper to continue than to change course. This is particular relevant for those sectors that require large, up-front investments such as the energy sector with its link to climate change.

Social justice, human rights and equitable economic growth are issues that are also key in the debate around the sustainability of our society. Though one can argue that simply seeking the highest risk adjusted return is the primary function of an investor, it is clear that allocating resources to certain companies can promote trends, halt them, or reverse them. Investing in tobacco and weapons currently provides a high return to the investor; the costs are borne by others through reduced health or perhaps conflict. Being an informed investor may not solve these problems, but making informed choices about where to invest is one of the foundations upon which the market economy is based. At the moment, a lack of transparency hinders the ability of investors to make these informed choices.

The relationship between companies and investors is one area where investors are in a strong position and can on the one hand encourage corporate environmental responsibility. On the other hand, investor pressure, or lack thereof, is often used as a scapegoat for inaction – the shareholder value argument used by management cannot stand if institutional investors value sustainability issues. This corresponds to our ambition to make the link between sustainable investments and sustainable development more visible than before. This is still an area that needs more research in the future. Another area that needs more attention is to illuminate the growing varieties of concepts of sustainable investments such as ethical investments (Sparkes, 1995), socially responsible investments, triple bottom line investments, sustainable investments, sustainable and socially responsible investments, responsible investments, extra-financial investments, or enhanced value investments.

## Acknowledgements

Some ideas and texts in this article come from an application (The Future of Institutional Investments in Sustainable Development) to the Swedish Research Foundation of Mistra which the editors – Pontus Cerin and Peter Dobers – jointly carried out with Markus Åhman and Mark Sanctuary from IVL, Shami Nissan and Matthew Kiernan from Innovest Strategic Advisors, Staffan Laestadius from KTH – Royal Institute of Technology, Susanne Sweet and Emma Sjöström from Stockholm School of Economics and Frank Figge and Tobias Hahn from the University of Leeds.

The authors would like to acknowledge the generous financial support received from the Swedish Foundation for Strategic Environmental Research – Mistra via the Mistra funded research program on Sustainable Investments: Towards a New Role for Institutional Investors.

## References

- Alexander, G. & Buchholtz, R. (1978): "Corporate Social Responsibility and Stock Market Performance", *Academy of Management Journal*, 21(3), 479-486.
- Bruyn, S. T. (1987): *The Field of Social Investment*. Cambridge: Cambridge University Press.
- Carlsson Reich, M., Wolff, R., Zaring, O., Zetterberg, L. & Åhman, M. (2001): *Ethical Investments - Towards a Sound Theory and Screening Methodology*. Stockholm: IVL.
- Carson R. 1962. Silent Spring. Fawcett Cress. Greenwich, UK.
- Cerin, P. & Dobers, P. (2001a): "What does the performance of the Dow Jones Sustainability Group Index tell us?", *Eco-Management and Auditing*, 8(3), 123-133.
- Cerin, P. & Dobers, P. (2001b): „Who is rating the raters?", *Corporate Environmental Strategy*. 8(2), 95-97.
- Dillenburg, S.; Greene, T. & Ereksan, H. (2003): "Approaching Socially Responsible Investment with a Comprehensive Ratings Scheme: Total Social Impact", *Journal of Business Ethics*, 43(3), 167-177.
- DiMaggio P J, Powell WW. 1991. Introduction. In *The new institutionalism in organizational analysis*. Powell WW, DiMaggio PJ (eds). 1-38. The University of Chicago Press: Chicago.
- DN. 2008. *Oljefonder på offensiven*. Dagens Nyheter. [2008-02-25, [www.dn.se](http://www.dn.se)], Stockholm, Sweden.
- Dowell, G.; Hart, S. & Yeung, B. (2000): "Do corporate global environmental standards create or destroy market value?", *Management Science*, 46(8), 1059-1074.
- EIRIS. 2008. *A brief history of SRI / ethical investment*. Ethical Investment Research Service – EIRIS. [March, 2008] [www.eiris.org](http://www.eiris.org).
- Fama, E. F. (1970): "Efficient Capital Markets: A Review of Theory and Empirical Work", *The Journal of Finance*, 25(2), 383-417.

- Figge, F. (1995): *Vergleichende ökologieorientierte Bewertung von Unternehmen (Öko Rating)*. Notwendigkeit, erste Ansätze, zukünftige Entwicklungen. Basel: WWZ.
- Figge, F. (2000): *Öko Rating. Ökologieorientierte Bewertung von Unternehmen*. Berlin: Springer.
- Figge, F. & Schaltegger, S. (2000a): "Erfolgreich enttäuschend." *Politische Ökologie*, (67-68), 98-100.
- Goetz, F. & Czymmek, F. (2002): *Der Beitrag des Öko-Rating für die unternehmerischen Stakeholder*. Köln: Universität zu Köln.
- Grossman, B. R. & Sharpe, W. F. (1986): "Financial Implications of South African Divestment", *Financial Analysts Journal*, 42(4), 15-29.
- Hamilton, I., 2007. Why the climate change debate has not created more cleantech funds in Sweden. Sustainable Investment Research Platform Working Papers. at [[www.sirp.se](http://www.sirp.se)], available 15 March 2008.
- Hamilton, S.; Jo, H. & Statman, M. (1993): "Doing Well While Doing Good? The Investment Performance of Socially Responsible Mutual Funds", *Financial Analysts Journal*, 49(6), 62-66.
- Hawken, P. (2004): Is Your Money Where Your Heart Is? Socially responsible investing. How the SRI industry has failed to respond to people who want to invest with conscience and what can be done to change it., Natural Capital Institute. [www.naturalcapital.org](http://www.naturalcapital.org)  
[http://www.dragonflymedia.com/portal/featured\\_stories/200410/hawken\\_paul.html](http://www.dragonflymedia.com/portal/featured_stories/200410/hawken_paul.html)  
 [March 2005]
- Hughes, S. B.; Anderson, A. & Golden, S. (2001): "Corporate environmental disclosures: are they useful in determining environmental performance?", *Journal of Accounting and Public Policy*, 20(3), 217-240.
- Ilnitch, A. Y.; Soderstrom, N. S. & E. Thomas, T. (1998): "Measuring corporate environmental performance", *Journal of Accounting and Public Policy*, 17(4-5), 383-408.
- Jung, E. J.; Kim, J. S. & Rhee, S. K. (2001): "The measurement of corporate environmental performance and its application to the analysis of efficiency in oil industry", *Journal of Cleaner Production*, 9(6), 551-563.
- Kreander N. 2001. *An analysis of European ethical funds*. The Association of Chartered Certified Accountants, London, UK.
- Koellner T, Weber O, Fenchel M, Scholz R. 2005 Principles for sustainability rating of investment funds. *Business Strategy and the Environment*. Volume 14, Issue 1, pp. 54 – 70.
- Kolk A, Mauser A. 2002. The evolution of environmental management: from stage models to performance evaluation. *Business Strategy and the Environment*. volume 11, issue 1, pp. 14-31.
- KPMG. 2005. KPMG International Survey of Corporate Responsibility Reporting 2005. KPMG Global Sustainability Services, Amsterdam, the Netherlands.
- Kurtz, L. (1997): "No Effect, or No Net Effect? Studies on Socially Responsible Investing", *The Journal of Investing*, 6(4), 37-49.
- Louche, C. (2004): *Ethical Investment: Processes and Mechanisms of institutionalisation in the Netherlands, 1990-2002*, Doctoral thesis, Rotterdam: *Erasmus University*.
- McWilliams, A. & Siegel, D. (1999): "Event Studies in Management Research. Theoretical and Empirical Issues", *Academy of Management Journal*, 40(3), 626-657.
- Meadows D H, Meadows D L. Randers J, Behrens C. 1972. *The Limits to Growth*. Universe Books, New York, NY.
- Mistra. 2001. *Screening of screening companies - an analysis of the quality of existing products/services*. The Foundation for Strategic Environmental Research - MISTRA. Stockholm, Sweden.

- Moskowitz, M. (1972): "Choosing Socially Responsible Stocks", *Business and Society*, 1(Spring), 71-75.
- OECD. (2002): "Total assets of Private Pension Funds within OECD countries". OECD Secretariat compilation from various national sources and Institutional Investors database. OECD.
- OECD. (2006): "OECD Guidelines on Pension Fund Asset Management. Recommendation of the Council.". Directorate For Financial and Enterprise Affairs, OECD.
- O'Rourke, A. (2003): How do socially responsible investors influence corporate behaviour, and to what effect? Paper presented at the 11<sup>th</sup> International Conference of Greening of Industry Network, San Francisco October 12-15 2003.
- Preston, L. E. (1982): Research in Corporate Social Performance and Policy. Greenwich, Conn.: JAI Press.
- Russo, M. V. & Fouts, P. A. (1997): "A resource-based perspective on corporate environmental performance and profitability", *Academy of Management Journal*, 40(3), 534-559.
- Schwartz, B. (forthcoming): "Environmental strategies as automorphic patterns of behaviour", *Business Strategy and the Environment*, published online since December 2006: <http://www3.interscience.wiley.com/cgi-bin/abstract/114029400/ABSTRACT> (retrieved on April 9, 2008).
- Shrader, C. B.; Blackburn, V. B. & Iles, P. (1997): "Women in management and firm financial performance. An exploratory study", *Journal of Managerial Issues*, 9(3), 355-372.
- Simon, G.; Powers, C. W. & Gunnemann, J. P. (1972): The Ethical Investor. Universities and Corporate Responsibility. New Haven, Conn.: Yale University Press.
- SiRi Company (2004): Green, social and ethical funds in Europe 2004. Accessed online February 25 at [http://www.ecodes.org/documentos/archivo/Fondos\\_Europa\\_2004.pdf](http://www.ecodes.org/documentos/archivo/Fondos_Europa_2004.pdf)
- Sjöström, E. (2004): Investment stewardship: Actors and methods for socially and environmentally responsible investments, Copenhagen: Nordic Partnership.
- Skillius, A. [2002] "Etiska Fonder: Kategorier, metoder och finansiell utveckling", *Folksam rapport*, April 2002.
- Sparkes R. 1995. *The Ethical Investor. How to Make Money Work for Society and Environment As Well As for Yourself*. Harper Collins Publisher, London, England.
- Sparkes R. 2001. *Ethical Investment: whose ethics, which investment?* *Business Ethics A European Review*, volume 10, number 3, pp. 194-205.
- Sparkes R. 2002. *Socially Responsible Investment. A Global Revolution*. John Wiley & Sons, Chichester. England.
- SustainAbility (2004): *Values for money: Reviewing the Quality of SRI Research*. London: SustainAbility.
- Svensk Natur*. (2004). Hur gröna är miljöfonderna? nr 2004-5, Stockholm, Sweden.
- Swanström, L., Cerin P. (2006): "Managing Sustainability Issues Sustainable – Business Opportunities", CPM-Report 2006:10, Centre for Environmental Assessment of Product and Material Systems, *Chalmers University of Technology*, Gothenburg, Sweden.
- Säve-Söderbergh, J. (2005) "Who Is Willing To Let Ethics Guide His Economic Decision-Making? Evidence From Individual Investments In Ethical Funds", Working Paper 7/2005, *Swedish Institute for Social Research (SOFI)*, Stockholm University, Stockholm, Sweden.
- Teoh, S. H.; Welch, I. & Wazzan, P. C. (1999): "The Effect of Socially Activist Investment Policies on the Financial Markets: Evidence from the South African Boycott", *The Journal of Business*, 72(1), 35-89.
- Thomson Extel and UKSIF 2008. *Thomson Extel & UKSIF SRI & Extra-Financial Survey*. Thomson Extel Surveys Identifying Excellence. 2006. [July, 2006] [www.extelsurveys.com](http://www.extelsurveys.com).
- UN PRI, 2008. *Signatories to the Principles for Responsible Investment*. [March, 2008] [www.unpri.org](http://www.unpri.org)

- Utterback, J. 1996. *Mastering the dynamics of innovation*. Harvard Business School Press, Boston, Ma.
- Walter I, Sisli E. 2006. *The Asset Management Industry in Asia: Dynamics of Growth, Structure, and Performance*. Stern School of Business, New York University, New York, NY 10012, USA [February, 2008] <http://ideas.repec.org>
- Weilenmann L. 2003. Småspararna har noll koll på fonderna. [My translation: Private Investors have Nada Fund Knowledge.]. *Dagens Nyheter* – DN. Stockholm, Sweden, September 22, 2003.
- Åhman, M., Carlsson Reich, M., & A-S Kumlin (2003): Ethical aspects in active ownership. *IVL-report B1545* Stockholm: IVL.

