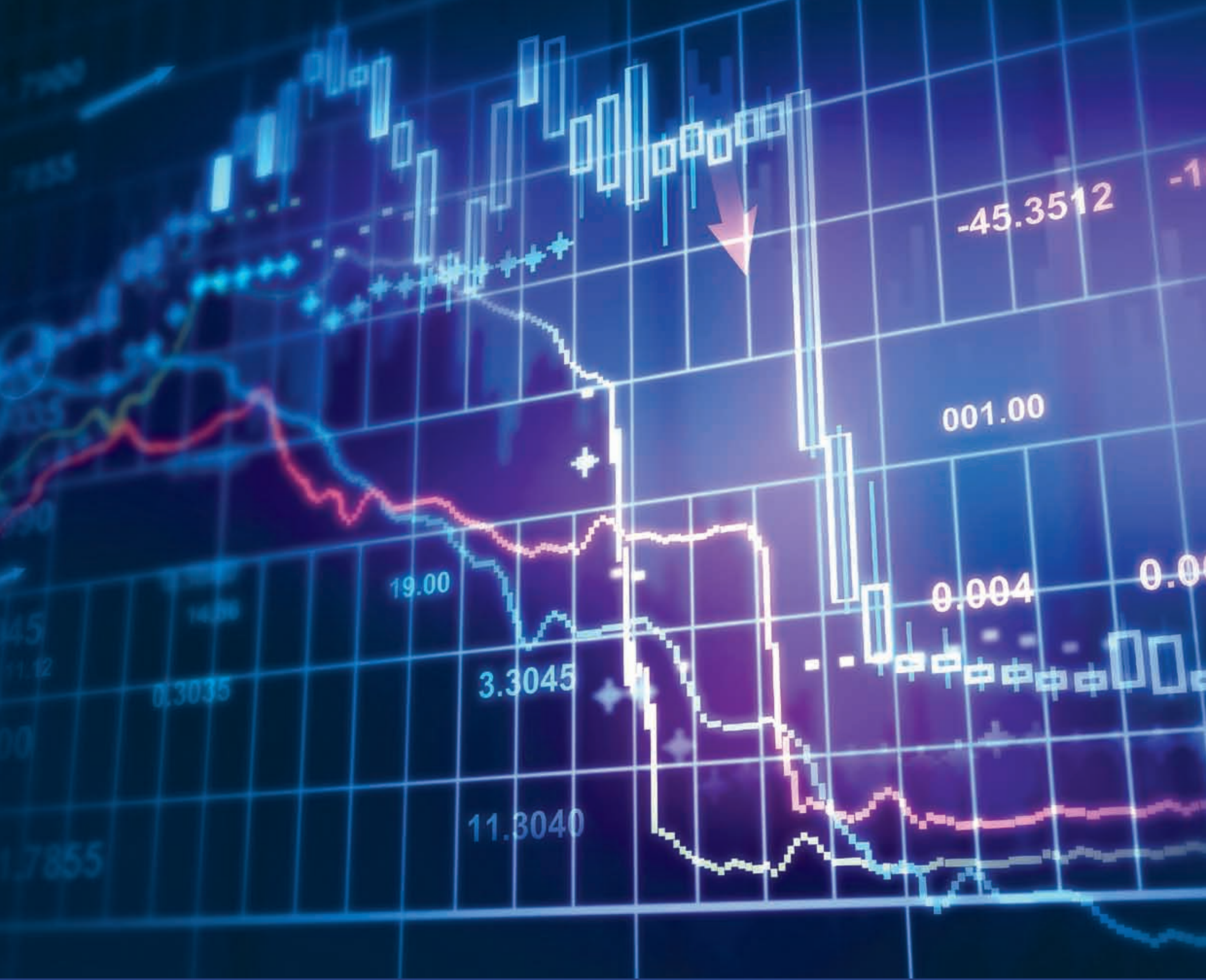


ANNUAL REPORT 2009

SUSTAINABLE INVESTMENTS

FUNDED BY MISTRA

About Sustainable Investments

The vision of the Mistra* funded research programme Sustainable Investments sees institutional investors eventually taking a leading role in promoting sustainable development and use their influence to change the behaviour of companies in which they invest.

LAUNCHED IN 2006, the Sustainable Investments (SI) research programme has a total budget of SEK 103 million for the period 2006 to 2012. Mistra (the Foundation for Strategic Environmental Research in Sweden) finances the programme. The programme host is Umeå School of Business at Umeå University with Professor Lars Hassel as Programme Director. Researchers come from various academic disciplines such as finance, economics, accounting, psychology, philosophy, management and statistics. The following universities are participating in the programme: Umeå School of Business at Umeå University, Sweden, Åbo Akademi University in Finland, School of Business, Economics and Law and the Psychology department at University of Gothenburg, Chalmers University of Technology in Gothenburg, Sweden, the University of Rome Tor Vegata and the University of Perugia in Italy, the European Centre for Corporate Engagement (ECCE) in the Netherlands which is connected to the University of Maastricht and Tilburg University and the Sustainable Value group with researchers from Queen's University Management School, Belfast, Euromed Marseille Management School and the Institute for Futures Studies and Technology Assessment, Berlin.

***Mistra, the Foundation for Strategic Environmental Research in Sweden,** supports research of strategic importance for a good living environment and sustainable development. Mistra's vision is to be a leading initiator in barrier-breaking research that prevents and solves significant environmental problems. Mistra invests in interdisciplinary research of the highest quality that, in collaboration with end-users, will contribute to preventing and solving such problems. Mistra provides funding for some SEK 200 million per year and currently supports approximately 20 major interdisciplinary research programmes. For more information about Mistra, please visit www.mistra.org.

Content

Be an Early Mover

2009 marks the fourth year of existence of the Mistra funded research programme Sustainable Investments. One precondition for Mistra's continued support is that the research conducted in the programme must meet high scientific standards, as well as be useful to practitioners.

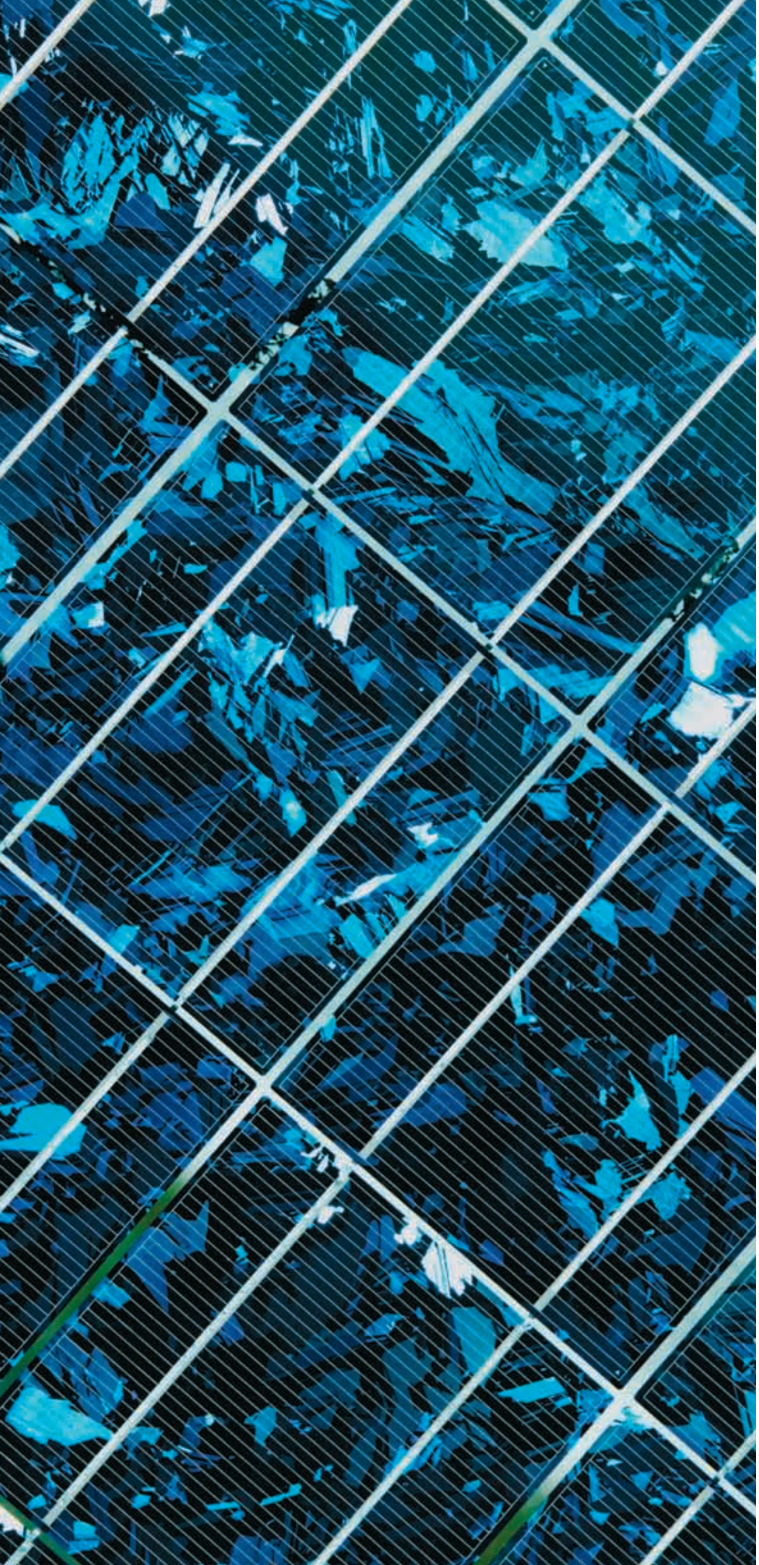
Being useful to a practitioner can be quite challenging. A targeted group of the practitioners must be identified (those who would find the research both relevant and practical). In our case, the practitioners are the institutional investors who manage other people's money: primarily pension funds, endowed foundations, and insurance companies. Secondly, the research topics must be as scientifically interesting and challenging as possible, and must add a clear value to these practitioners. Third, both the

research topics and the research results must be effectively communicated in the practitioner's professional language. High quality science is challenging in its own right; high quality science that also is useful to practitioners is extra challenging. Thus, communication is key.

In my view, the Sustainable Investments research programme has already produced a number of interesting findings that the investor community has yet to fully appreciate. Some examples include: the effect of individual environmental, social, and governance factors upon returns; the relevance of companies' environmental performance and reporting; and, the importance of sustainability in the real estate sector. In capital markets, as in other markets, it pays to be an early mover.

There is also an undisputed momentum whereby financial institutions increasingly incorporate sustainability criteria into their stated business models. For example, one has only to witness the increasing number of signatories to the UN Principles for Responsible Investment (currently at 680, up from 560 only last summer – with assets exceeding US$ 18 trillion). Research on the successful integration of sustainability criteria in asset management will be very useful.

LARS GAVELIN
Chairman of the Board for the programme and Senior Advisor at the Ministry of Finance



Fiduciary Responsibility

Institutional investors, especially pension funds, play a key role in the financial services sector. Since their liabilities extend far into the future, they naturally have a long-term perspective. Pension beneficiaries have not only a direct interest in the long-term stream of income from pension funds; they also do in the state of the world that generates this stream of income. Long-term issues that may look intangible today might be quite tangible to future beneficiaries.

The vision of the research programme *Sustainable Investments – Towards a New Role for Institutional Investors* is that large and powerful investors can make a difference in sustainable development.

After four years of research, fundamental changes to account for sustainability are still lacking amongst the mainstream pension funds. There are some promising signs, such as institutional investors signing the UN PRI and taking some engagement initiatives; however, the recent financial crisis has demonstrated that short-term financial gains are fostered without sufficient consideration given to longer-term social costs and externalities.

The reluctance of pension funds to expand investment strategies beyond conventional financial barriers and to include extra-financial drivers – such as climate change and other environmental issues – is frequently attributed to the fiduciary duty or responsibility of the trustees. Such an interpretation is too narrow to be relevant today. Climate change presents a real financial concern and cannot, even in a narrow sense, conflict with the interpretation of fiduciary responsibility. In a situation where fiduciary responsibility is slow to adapt to changing social circumstances, legislation could help to alleviate the uncertainty surrounding the concept.

LARS G. HASSEL
Programme Director

Program Overview

The overall objective of the Sustainable Investments (SI) programme is to *find out how sustainable investment practices can create added value for investors and identify barriers to mainstreaming such practices.* SI aspires to contribute to a business case, as well as to sustainable development.

RESEARCH ON SUSTAINABLE INVESTMENT has gained momentum. However, it is still too early to tell if and how sustainable investment and corporate engagement affect the behaviour and performance of companies. *What are the limits that prevent companies from improving sustainability in a market economy?* What is also not clear is how sustainable investment and corporate engagement can be applied in a cost-effective way. *What drives asset owners and managers to move towards sustainability? What impedes them?* Therefore, while exploring how financial markets can contribute to sustainable development we must also ask what sustainability issues may mean for financial markets.

The programme has three main ways to overcome the barriers that prevent implementing sustainable investment:

- To reinterpret and redefine the concept of fiduciary responsibility in asset management in order to include sustainable development.
- To evaluate and improve the understanding of the investment case for sustainable investing concepts.
- To explain the mechanisms through which sustainable investing concepts can influence company behaviour and lead to positive outcomes concerning sustainability.

Institutional investors are the main targets for this research. The Sustainable Investments research programme supports all actors in the institutional financial value chain: asset owners, trustees, regulators, fund managers, company boards, CEOs, consultants, auditors and brokers.

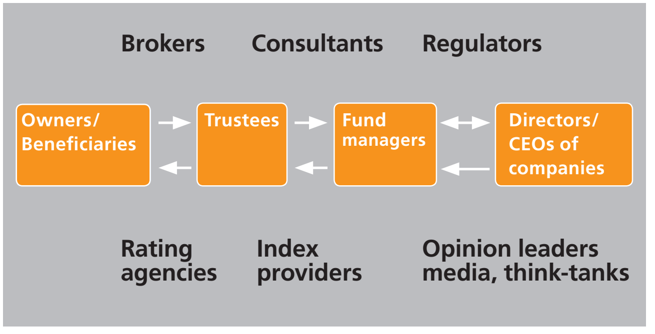


Figure 1: Value chain in the institutional financial market.

The research is performed in five areas: Sustainable Investment Portfolios, Company Performance and Sustainability, Incentive Systems, Fiduciary Duty, and Alternative Sustainable Investments Markets.

SUSTAINABLE INVESTMENTS PORTFOLIOS

When constructing SI portfolios and defining their investment restrictions as per sustainability, one must keep uncertainty regarding financial outcomes in focus. This research aims to design a framework that can assist fund managers in constructing sustainable investment portfolios and provide trustees and investment consultants with the capability to assess how fund managers measure up against specified sustainable investment criteria.

COMPANY PERFORMANCE AND SUSTAINABILITY

This work aims to expand the concept of the sustainable company from a sustainable investment perspective. The international investment community uses global surveys to determine the use of extra-financial information. These groups include: institutional and private investors, analysts, companies, and other social groups that are crucial in determining how to best address environmental, social and governance (ESG) issues. A value-based sustainability analysis will be performed. This analysis will provide a quantitative monetary assessment integrating the environmental, social and financial performances of Nordic companies. The results of the analysis will feed into the development of a Nordic value rating and the construction of a Nordic value index.

Sustainable investment strategies often rely upon ratings. Therefore, it is essential that such ratings are valid and capture relevant aspects of corporate activity. This research demonstrates how theoretically derived sustainability parameters, in combination with industry-specific life-cycle analyses, can be used to provide theoretical and empirical justification for selecting environmental evaluation criteria. The aim is to develop evaluation criteria that capture companies' efforts to improve their environmental performance, rather than evaluate their present performance.

SI researchers will collaborate with financial analysts and auditing firms in order to assess the value relevance and quality of corporate disclosures and how to examine companies communicate triple-bottom-line (environmental, social and financial) criteria in a Global Reporting Initiative (GRI) framework. Parallel studies will also be conducted on sustainable development in Swedish companies and the impact environmental regulation (such as carbon tax) has upon the productivity in the Swedish industry.

INCENTIVE SYSTEMS

SI research has shown that institutional investors' sustainability goals do not influence portfolio management to the desired extent. The program investigates how changes in incentives and monitoring can influence portfolio managers' investment decisions. Counteracting short-termism within the finance sector is believed to help organizations to manage their practices in a way that is more consistent with sustainable development.

FIDUCIARY DUTY

A central explanation as to why few institutional investors currently engage in sustainable investment is their belief that this type of investing conflicts with their fiduciary responsibility. It is crucial to determine whether current legislation regarding fiduciary responsibility can be (re-)interpreted to remove these types of conflicts; it is also necessary to establish how future fiduciary duty legislation can be defined in order to increase its consistency with sustainable investment. This research has been closely anchored in the Swedish institutional setting by employing a qualitative research method that explores how Swedish State Pension funds and other institutional investors (and their portfolio managers) implement sustainable investment concepts and engage as investors in order to influence companies.

ALTERNATIVE SUSTAINABLE INVESTMENTS MARKETS

By expanding the research into new SI markets (such as credit, venture capital and commercial property markets) SI also considers other asset classes than equities.

Some Highlights

SUSTAINABLE INVESTMENT PORTFOLIOS

- Studies based upon existing environmental ratings show that companies performing well on the environmental side are usually also more profitable and demonstrate a higher market value.
- Research results are inconclusive regarding the present economic performance of SI portfolios with positive and negative screening attached.

COMPANY PERFORMANCE AND SUSTAINABILITY

- Sell and Buy-side analysts in financial markets are increasingly paying attention to ESG issues.
- Evaluation criteria or ratings are needed in order to capture companies' efforts to improve their future environmental performance, rather than target, their present performance.
- A sustainable value approach that integrates the triple-bottom-line is needed: environmental, social and financial performance.
- Companies' environmental disclosures need to improve (this is especially true for emissions accounting).
- Historically, regulatory pressures from CO_2 and energy taxes have taken up space over productive investments in Sweden.

INCENTIVE SYSTEMS

- Changes in how portfolio managers are incentivized and monitored counteract short-termism in the finance sector.

FIDUCIARY DUTY

- The concept of fiduciary duty is culture-specific and changes over time.
- Despite some progress, it remains to be demonstrated that pension funds are able to drive companies towards more sustainable development.
- Governmental regulation can move institutional investors to be more active owners.

ALTERNATIVE SUSTAINABLE INVESTMENTS MARKETS

- ESG information can have material impact not only upon firms' equity ; it can also affect credit ratings and, therefore, their cost of debt.
- Real estate can play an important role in making our societies more energy efficient; investing in green buildings is a viable business opportunity.
- Venture Capital funds for new 'green' technology – such as clean tech – have a clear potential to contribute to sustainable development.

Useful Research

Knowledge that is produced in the research programme Sustainable Investments (SI) is intended to be useful for, asset managers, analysts and investors (to name a few). More and more asset managers are asking for results that they can find useful.

AS INTEREST IN SUSTAINABLE INVESTMENTS increases amongst investors, so does the demand for useful tools for analysing companies' social and environmental performance. The SI research programme aims to produce guidelines and recommendations for sustainable investment; it also strives to analyse how companies' profitability (and returns for institutional investors) would be influenced if a company's attention to sustainable development in its investment portfolio where taken into account. The questions, then, are: *to what extent do asset managers and investors find the knowledge that the research programme generates to be useful. Are the SI researchers focusing upon the questions that practitioners need answered in order to make sustainable investments?*

Christina Kusoffsky Hillesöy is responsible for sustainable investments at AP3 – Third Swedish National Pension Fund. In addition, she chaired the ethical advisory committee for the AP-funds in 2009. AP3 makes several requirements of the companies that they invest in. Companies must act in compliance with the international conventions to which Sweden adheres. AP3 also works proactively to improve awareness – primarily amongst Swedish companies – of environmental and social risks. For example, the companies in which they invest in must have or initiate codes of conduct, risk management systems, and managerial systems to ensure that failures and/or problems that occur are not repeated. One of the most effective ways of positively influencing companies is to exercise active ownership. "We believe that the best way to influence a company is to initiate an active dialogue with it. The dialogue should not only focus

"If there were research results that show active ownership leads to more sustainable companies, mainstream asset managers would be more inclined to attempt to take environmental and social factors into account in their valuing models," says Christina Kusoffsky Hillesöy, responsible for sustainable investing at AP3 – Third Swedish National Pension Fund.

on identifying failures, but must also be forward looking," says Kusoffsky Hillesöy.

VALUE ENVIRONMENTAL PERFORMANCE

When it comes to valuing a company's environmental work, a price is often put upon environmental emissions and the risks associated with them. However, it still is not easy to connect risks with economic performance; there is room for improving tools for analysing different well-known environmental risks. Christina Kusoffsky Hillesöy believes that this is an area where research can contribute valuable knowledge. "There are some key indicators related to environmental risks that most companies report, even if the quality of their reporting varies. The problem is that many economists have difficulty understanding these indicators. This indicates a weakness in economics education. Colleges should begin teaching at the bachelor's level how to value environmental factors, and how environmental information can provide extra value when evaluating a company," she says.

Research in this area is important; it is about convincing asset managers and investors that sustainable investing is profitable. However, practitioners do not always fully comprehend the questions that researchers ask; in turn, researchers do not always understand which questions are the most relevant for investors and asset managers. "If the results of the research being performed are to be useful, practitioners must be able to apply them. One must be able to use the models that researchers produce," says Christina Kusoffsky Hillesöy.

ACTIVE OWNERSHIP

Kusoffsky Hillesöy believes that the biggest problem is not measuring and valuing a company's environmental work, but rather the company's work with social issues. "When valuing companies, it is a lot harder to integrate issues such as respect for human rights and the way in which risk is affected when human rights are violated. Everyone knows that it becomes costly when companies violate human rights," says Kusoffsky Hillesöy.

She would like to see the research take on questions about the ways and the extent to which active ownership and doing business from a foundation of social and environmental ▷

▷ responsibility really affects the value of a company. "We share a belief that well-run businesses are more sustainable investments, but we would like to see evidence of this: that it actually influences stock values. That, in turn, would have a large impact on the stock market. If there were research results showing that active ownership leads to more sustainable companies, mainstream asset managers would be more inclined to attempt to take environmental and social factors into account in their valuing models," says Kusoffsky Hillesöy.

"There is a gap between researchers' longer time horizon and the shorter time horizon of practitioners."

One problem in this particular context is that sustainable investment is relatively new. This which means that the time series that researchers can produce are relatively short. In addition, practitioners can feel that it takes time before research results are finalized and presented. "As a result, practitioners out in the field get bored with the questions, or feel that they are no longer relevant. There is a gap between researchers' longer time horizon and the shorter time horizon of practitioners," says Christina Kusoffsky Hillesöy.

CLEAR AND PREDICTABLE CRITERIA

John Howchin is a senior analyst at Norges Bank Investment Management, and is responsible for environmental analyses, company dialogues and strategic development. He also sits on the board for the Sustainable Investments research programme. Howchin believes that asset managers and investors can experience the questions being researched as somewhat difficult to comprehend. "Firstly, there is a risk of the sustainable investments research area being perceived as more complicated than it is. Many asset managers and analysts already look at issues related to sustainable investments, but with another terminology and often with a shorter time horizon in mind. I believe that the research programme can contribute to increased clarity about what is meant by sustainable investments," he says.

Howchin uses the climate issue as an example: where the market and investors are constrained by how governments and different trade systems regulate it. "There is an image that financial markets have influence, but they must follow a rather clear framework. I don't believe that asset managers actually have problems with managing the climate issues, as long as they have the right tools and clear and predictable criteria to follow," he says.

Howchin sees the discussion about sustainable investments as long term. The important thing is to adopt tools or structures that result in putting prices on what is known as externalities, (such as greenhouse gases, for example). "There is an idea that as long as those structures are sufficiently long-term and predictable, the market will follow. But we see very little evidence of such structures on the market when it comes to making decisions about sustainable investments," says Howchin.

CLIMATE CHANGE IS ALREADY HAVING AN EFFECT

John Howchin sees the increasing interest in valuing environmental aspects when investing to be a result of environmental issues becoming more tangible in relation to a company's returns. To a certain extent, the market and companies have already begun to adapt.

Howchin says there is a lot to which research can contribute when it comes to sustainable investment. He cites examples of this interesting area of inquiry as being incentive systems for asset managers and company leaders, and their impact on investments in both the short and long term. "In the aftermath of the latest financial crisis, one can see increased interest in more long-term investment strategies. As a result, questions related to environmental, social and governance (ESG) factors have become more relevant. The market is starting to ask if companies manage ESG risks correctly, if they are aware of the risks associated with their activities, and whether or not they have implemented secure systems that can manage these types of risk," says Howchin. In other words, sustainable investments is about the potential for the market to gain through investing based upon long-term timelines.

"As long as asset managers and analysts cannot put a price on different risks, the finance market is living in its own world – apart from the rest of the world," says John Howchin, senior analyst at Norges Bank Investment Management.

MONEY'S INFLUENCE

John Howchin also points to the difference in practitioners' and researchers' time horizons: "It is necessary, therefore, to bring the two closer: to perform research with a somewhat shorter time perspective, but also to get those who make the decisions upon the portfolios to begin to think more about the long term.

Sofia Hagman is responsible for corporate social responsibility (CSR) at KPA Pension. One third of global capital today is pension capital, and Sofia Hagman is aware of the large influence that money has, as well as the enormous potential that pension funds have to influence the market to move toward sustainable investing. "Those that have a well-thought-out strategy can influence actively. Therefore, it is also important to talk about money's influence," she says.

KPA Pension has elected not to invest in companies that don't live up to the ethical and social criteria, which the pension company has established. Hagman believes that the research can contribute to strengthening and providing support for a variety of issues. "For example, it is fairly well proven that there is a connection between environmental responsibility and long-term investments – and that it actually is profitable. However, it would be helpful if research could contribute in the same way to illuminating the connection between social responsibility and economic returns. There should be a positive connection between well-run companies that are socially responsible and their returns. In any case, we know that it is costly for those companies that are not socially responsible," she says.

"We need useful information. It can't be too theoretical: it needs to be more hands on," says Sofia Hagman, responsible for CSR at KPA Pension.

MORE INFORMATION DESIRED

Collaboration between practitioners and researchers can be improved. Sofia Hagman would like to see more information about the different research results that can be useful for practitioners; this could preferably come in the form of a newsletter or a similar form of communication. Alternatively, researchers could take on advisory roles in a range of working groups. "We need useful information. It can't be too theoretical; it needs to be more hands on. At the same time, one shouldn't trivialize it. The research is important because it can go deep into analyses and, in that way, complement asset managers' and investors' knowledge," says Sofia Hagman.

Green Buildings – Profitable Business

Green investments in real estate are good for both the environment and the building owners. Research conducted in the Sustainable Investments (SI) programme has shown that sustainable buildings benefit everyone.

A LOT CAN BE DONE in the building sector to reduce environmental impact. Calculations indicate that the building sector accounts for approximately 40 percent of global use of both raw materials and energy. Add to that about 55 percent of all timber that is not used for fuel. An approximate 30 percent of global greenhouse gas emissions stem from the construction and use of buildings. Therefore, influencing the building sector to be more resource efficient and energy effective could be of major importance: not simply for the sector but for society as a whole.

Energy costs amount to the largest single cost for or real estate owners and tenants in public buildings, often accounting for one third of the total operating cost. Reducing these costs is in everyone's best interest. There is also growing interest in sustainable design of buildings. However, in order for the building industry to think in more eco-friendly terms, there must be profits to be made.

"Our results are clearly of interest to both the building sector as a whole and to investors. We have been able to show that sustainable buildings actually are valued higher on the market. Thereby, the incentive to design, build, and own green buildings has also increased." says Nils Kok, Assistant Professor at Maastricht University.

Now, three researchers working in the SI programme have shown that economics and thinking sustainably in the real estate market go hand in hand. They published an article in august 2009 entitled *Doing well by doing good? Green office buildings.* Nils Kok, Piet Eichholtz and John Quigley show that the environment, building owners, tenants and investors all benefit from green buildings; in turn, the market values real estate accordingly. Their research shows, among other things, that sales prices for energy-efficient and sustainable buildings are approximately 16 percent higher, and that rents are about three percent higher than for traditional properties. Moreover, operating and maintenance costs are lower for both building owners and tenants when energy consumption is reduced.

Nils Kok, Assistant Professor at Maastricht University summarizes the findings: "We have been able to show that buildings with lower energy consumption have a higher value on the real estate market: the lower the energy costs the higher the value of the buildings. If the market values sustainability in buildings, investor interest in sustainable buildings will increase."

EVERYONE BENEFITS FROM LOWER ENERGY COSTS

When the study was launched in 2007, oil prices had begun to increase, as had public awareness about climate change. As the market began relatively quickly to place higher value on green buildings, the interest in constructing buildings that were better from an environmental perspective grew. So did

interest in renovating and adapting existing buildings to make them more energy efficient (at least in the United States, where the study was performed).

"When we began to study the American real estate market to see how the market valued properties with an ecological or green profile, there were maybe one or two buildings in the city centre that could be classified as green according to our criteria. But today – just two years later – we see that the percentage of green buildings has increased to roughly one fourth of all new construction in larger cities. This is no longer a marginal phenomenon; it is approaching what we would call critical mass: they are so many that they are actually influencing development," says Nils Kok.

THE AMERICAN MARKET IS HOMOGENEOUS

The researchers have focused on commercial buildings in the United States. There are several reasons why they chose the American over the European market. For one, the American market is considerably larger. In addition, there are two established certification programmes that aim to influence the development of the real estate market toward sustainability: the Energy Star programme, which is financed by two federal agencies; and Leadership in Energy and Environmental Design (LEED), which was founded by a private non-profit organisation.

"One disadvantage of studying the real estate market in Europe is that different countries have different systems for encouraging sustainable investment in the building sector. This makes it difficult to compare European countries and difficult to draw conclusions about how effective different policy instruments and measures are," says Kok.

Today, certification under the Energy Star programme symbolizes lower costs for owners, better energy conservation, and higher sales prices. LEED is more complex than Energy Star; it was introduced to encourage development of ecologically-sustainable buildings. In addition to energy efficiency, LEED also takes a number of other factors into account: choice of construction site, decontamination of lots, and the availability of bicycle storage. "Because both programmes already existed in the US, we have been able to study how they have been applied on the market and how they have influenced rental and sales prices. Both programmes have contributed to developing a more sustainable real estate market," says Nils Kok.

UNUSUALLY LARGE INTEREST

The article, which is forthcoming in the highly acclaimed academic journal, American Economic Review, has attracted unusually large interest. This has also been reflected on the Royal Institute of Chartered Surveyor's website (www.rics.org) where *Doing well by doing good? Green office buildings* has been ▷

▷ downloaded more than 60,000 times. Policymakers and investors have shown great interest in the results published in the report. The building industry has also shown interest in the study. The seminars that the researchers have held in conjunction with the study have been well attended. Kok is pleased with the success of the report: "Our results are clearly of interest to both the building sector as a whole and to investors. We have been able to show that sustainable buildings actually are valued higher on the market. Thereby, the incentive to design, build and own green buildings has increased."

"Green building is no longer just some marginal phenomenon; it is beginning to reach what we call critical mass."

What makes this study so interesting is that the researchers have produced evidence that it is profitable to invest in environmentally-friendly buildings. They have also pointed out some conditions that can be changed in order to speed up the process toward achieving a sustainable real estate market – both in the US and in other parts of the world. In part, they say, the market needs to be regulated with the help of public policy and policy measures. One transparent labelling system is also required. Furthermore, effective valuations must be achieved. "Looking at how appraisers value buildings, it is considered a bit more expensive to build sustainably. But this doesn't always take into account that sustainable buildings have lower operating costs and are cheaper to maintain," says Kok.

A MARKET UNDER DEVELOPMENT

Nils Kok believes that the market is still immature and in the process of developing. For example, there are no globally accepted labelling systems in place yet to make it easier for investors to compare different countries' real estate markets. "In addition, price setting institutions should continually check that they are actually measuring the right things and producing information that works as an incentive for investors to move toward a sustainable real estate market," he says.

Kok does not find it surprising that the market places a higher value on buildings with lower energy costs. What does surprise him, however, is that investors actually put such a precise price on energy consumption: "This indicates that energy costs can be an effective indicator and that investors value this on the market." He has performed a similar study in the Netherlands, where he examined how energy labelling of homes – which is obligatory under new EU regulation – actually influences prices. He found that energy-efficient buildings are valued higher than others. "If the market works effectively, this will lead to smaller and older buildings being valued lower as a function of their energy costs. That makes it interesting to not only build new buildings that are environmentally friendly, but to renovate older buildings and lower their energy consumption as well," says Kok.

Nils Kok, Assistant-Professor at Maastricht University in the Netherlands participates in the research programme Sustainable Investments. He has been given the Best Dissertation Award by the Aareal Bank & European Business School, and the European Award for Best Dissertation on Finance and Sustainability by French Social Investment Forum, for his PhD thesis entitled Corporate Governance and Sustainability in Global Property Markets. He is currently a visiting scholar at the University of California, Berkely.

2009 in Brief

Umeå School of Business.

Eva Thörnelöf, Mistra and Mats Williander, Connect Väst at the seminar about cleantech companies in April.

JANUARY

The programme entered its second phase, hosted by Umeå University and with Lars Hassel as Programme Director. In this new phase, the original two sub-programmes are combined and organized into the following five research areas: Sustainable Investment Portfolios, Company Performance and Sustainability, Incentive Systems, Fiduciary Responsibility, and Alternative Sustainable Investments Markets.

FEBRUARY

SI and the Swedish Ministry of Enterprise co-organized a "Sustainable Businesses" conference in Stockholm. Jeroen Derwall discusses responsible investment trends in the finance industry. He concludes that, in order for environmental, social and governance issues to influence mainstream investments, they must be integrated into investment processes.

APRIL

Anders Isaksson moderates the Mistra seminar *Are cleantech companies winners or losers in the hunt for capital in the aftermath of the financial crisis?*, which is held in conjunction with the Industry and Trade Associations (Västsvenska Industri- och Handelskammaren) annual event in Gothenburg.

MAY

SI researchers convened at the Department of Psychology in Gothenburg for a two-day workshop to present and discuss ongoing research.

JUNE

Cristiana Manescu presents her thesis "Risk and Return Implications of Corporate Social Responsibility" at the School of Business, Economics and Law at the University of Gothenburg. She receives her licentiate degree.

JULY

During the Almedalen political week in Visby, Lars Hassel participates in a Mistra-hosted a seminar: *Capital and Climate,* where a film about the Sustainable Investments research programme is launched. (The film is available at www.sirp.se and www.mistra.org.)

A lot of discussions during the coffee break at the Sustainable Business conference in Stockholm in February.

Licentiate Cristiana Manescu with her supervisor Catalin Starica and the discussant Leonardo Bechetti, Professor at University of Rome Tor Vergata.

SEPTEMBER

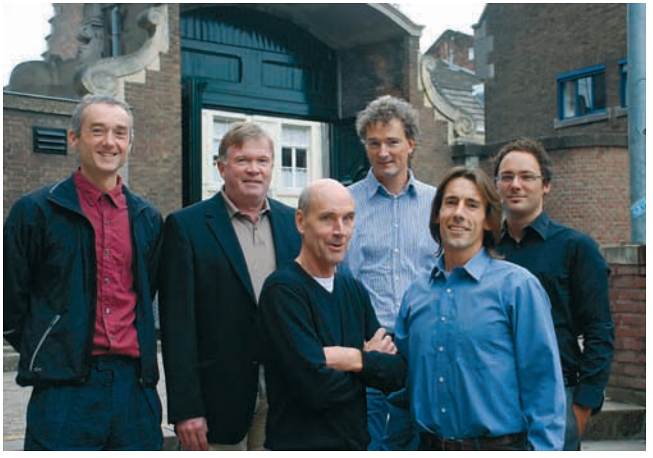
Maria Andersson successfully defends her doctoral thesis entitled *Social Influence in Stock Market,* which focuses upon herding in experimental financial markets.

The European Center for Corporate Engagement (ECCE) organized a two-day conference on SRI and ESG in Maastricht, the Netherlands. The event attracted eminent American and European researchers and practitioners.

OCTOBER

Several SI researchers presented their work at the second annual PRI Academic Network Conference in Ottowa, Canada. Rob Bauer and Lars Hassel become members of PRI's Academic Network Steering Committee.

Nils Kok receives the Aareal Bank & European Business School 'Best Dissertation' award and the French Social Investment Forum 'European Award for Best Dissertation on Finance and Sustainability' for his doctoral thesis *Corporate Governance and Sustainability in Global Property Markets.*



The management group meet in Maastricht before the SRI and ESG conference. From left to right: Catalin Starica, Lars Hassel, Anders Biel, Rob Bauer, Pontus Cerin and Tobias Hahn.

Research Outcomes

Sustainable Investments research is performed in five areas: Sustainable Investment Portfolios, Company Performance and Sustainability, Incentive Systems, Fiduciary Duty, and Alternative Sustainable Investments Markets.

Part A: Sustainable Investment Portfolios

Sustainable investment portfolio analysis is at the heart of strategic decision making regarding long-term sustainability issues. There has been some discussion on the approach which investors should take in order to achieve the most optimal socially responsible investment portfolio. The research group approaches the task of constructing optimal sustainable investment portfolios from perspectives that are relevant for investors and portfolio managers

Part B: Company Performance and Sustainability

Companies and investors require long-term performance metrics. Although individual metrics may have a shorter timelines, the goal of using such metrics is to maximize future value and to provide the investment community, companies, and other stakeholders with concrete information regarding environmental, social and governance (ESG) issues.

Part C: Incentive Systems

Counteracting short-termism in the finance sector is expected to help companies manage their business in ways that are more closely aligned with sustainable development. Studies are conducted in this part of the programme, about how portfolio managers' investment decisions are affected by how they are incentivised and monitored.

Part D: Fiduciary Duty

Fiduciary duty is a central concept in most views and discussions about what institutional investors can and should do in legal and moral contexts. There is a growing debate in the area of sustainable investment regarding how to understand these responsibilities.

Part E: Alternative Sustainable Investments Markets

Inquiry into venture capital, real estate and credit markets – and the implications sustainability has upon these markets is conducted in Alternative Sustainable Investments Markets research.

Project	Aim	Results	Benefits for Practitioners
A1 Sustainable Investment Portfolios **Researchers** Kees Koedijk, Jeroen Derwall, and Rob Bauer	To analyze the risk/return implications of integrating Environmental, Social and Governance (ESG) issues into equity investment portfolio management.	This work represents the first comprehensive review of SRI performance that addresses the need for a specific focus upon individual criteria underlying SRI (i.e. ESG and ethical screens) in order to better understand the return and risk features of SRI approaches. The results clearly show that better understanding is needed regarding whether or not investor preferences are strictly financial.	The research will help (institutional) investors understand how certain ESG factors influence the performance of their investment portfolios. The results are relevant for investment policies. The research also provides a better understanding of a potential trade off between ESG objectives and financial goals, which has potential implications for fiduciary management.
A2 Sustainable Investment Portfolio Management **Researchers** Rickard Olsson, Lars Hassel, and Kees Koedijk	To assess minimum tracking error across different investment benchmarks/universes and different types of sustainability criteria for varying levels of sustainability criterion stringency. To develop and test analytical tools for improving portfolio efficiency and tracking performance under different sustainability criteria.	This project started in September 2009. The research is expected to generate scientific evidence and develop analytical tools that can enable institutional investors and asset managers to better integrate sustainable investing criteria in their portfolio management and, thereby, contribute to sustainable development.	Knowing what to expect about portfolio performance and tracking error under different sustainability criteria is instrumental: both in setting investment objectives and in performance evaluation. Disappointments arising from failures to meet divergent – and possibly unrealistic – expectations could be detrimental to sustainable investing at large. The evidence produced in this project should facilitate communication and lead to converging expectations. In addition, the analytical tools developed should help to improve the performance of sustainable portfolios.

A3 The Fact Book of Sustainable Fund Manager:			
Project	**Aim**	**Results**	**Benefits for Practitioners**
A3.1 Panel Data Models **Researchers** Catalin Starica and Cristiana Manescu	To decide if CSR information is an "alpha driver" or an "exotic beta driver." The working hypothesis is that CSR information as a whole – or parts of it – is or has been (at some point during the last two decades) an "alpha driver."	The results indicate a shift in the effect of CSR upon stock returns from positive (July 1992 – June 2003) to negative (July 2003 – June 2008). This is consistent with the fact that sustainability risk has been priced efficiently in recent years, possibly due to increasing CSR information availability. The findings reveal a significant positive relationship between strategic CSR and economic performance.	CSR performance (measured with respect to Human Rights, Product Safety and Employee Relations) seems to affect the risk profile of corporations: higher CSR engagement reduces the sustainability risk, thus leading to a lower cost of equity capital. As a consequence, the expected returns will be lower in an efficient market.
A3.2 The Missing Link between Returns and CSR Scores – Latent Variables **Researchers** Catalin Starica and Elena Stanghellini	To understand the relationship between CSR scores and measures of financial performance by modelling both of them as expressions of three latent variables corresponding to Corporate, Environment and Social dimensions.	No activities in 2009.	By taking into account that CSR performance is a multidimensional construct that involves different aspects of environmental and social issues, this research is expected to shed light upon the relationship between CSR performance criteria and indicators of the business success of companies.
A3.3 Portfolio Management with CSR Constraints **Researchers** Stefano Herzel, Catalin Starica, and Marco Nicolosi	The main objective of the research is to study the impact of different types of sustainability constraints on the so-called "efficient frontier."	The "efficient frontier" computed upon the total set of assets is not significantly different from that obtained by applying strong screening criteria for the period 1992-2008. There are no significant constraints upon the cost of sustainability, even for strong screening criteria. Investors can constrain their investment portfolios by applying CSR criteria without significant financial losses	This research will help to quantify the impact over time of different kinds of social screening. In order to mainstream Sustainable Investments, it is important to have a precise measure of the cost of introducing non-financial constraints to portfolio management.

Project	Aim	Results	Benefits for Practitioners
B1 Improving Measurements of Companies' Environmental Performance **Researchers** Anders Biel, Martin Hedeström, and Ulrika Lundqvist	To provide SI rating agencies with recommendations and to address future-oriented environmental evaluation criteria.	When operationalizing the concept of sustainability in analyses of companies the following aspects have been identified: sustainability principles, impact categories, future versus present-oriented criteria, data availability, number of criteria, basis for comparison, weighting of criteria, and sector specific criteria. The dominating pattern among SI rating agencies is that criteria is labelled in terms of risk; it is less common to define criteria in terms of opportunities.	As SI investment strategies often rely on ratings, it is essential that these ratings are valid and capture relevant aspects of corporate activity. Redirecting focus from present evaluation criteria towards future-oriented evaluation criteria is intended to aid institutional investors in identifying investment opportunities. This may also provide a better basis for positive screening practices.
B2 Value-based Sustainability Analysis of Nordic Companies **Researchers** Ralf Barkemeyer, Breeda Comyns, Frank Figge, Zoe Foss, Tobias Hahn, and Andrea Liese	To compile a value-based environmental sustainability analysis of Nordic companies using the Sustainable Value approach. To provide a quantitative monetary assessment that integrates environmental and financial performance.	This project started in July 2009. The research is expected to provide a value-based assessment of corporate sustainability performance. Firm performance is assessed from the perspective of a higher (e.g. societal) level.	Environmental sustainability assessments of companies with the Sustainable Value approach as well as the value-based sustainability rating and sustainability index of Nordic companies will provide tangible benefits to financial market actors that are interested in integrating environmental issues in their investment and financial decision making.
B3 Corporate Sustainability Reporting and ESG Performance **Researchers** Pontus Cerin, Lars Hassel, and Henrik Nilsson	To study the value relevance of ESG factors for analyst and investors.	Financial analysts that incorporate environmental aspects do it from a) a product environmental performance perspective and b) from a company performance perspective. However, they omit information on environmental preparedness, such as environmental policies, strategies, management systems, and reporting.	Understanding the value relevance of ESG information is the linchpin in applying these issues among the actors in the investment value chain: from the beneficiary to the managers of the firm in which has been invested.

Project	Aim	Results	Benefits for Practitioners
B4 Global Long-term Value Outlook – A Global Survey **Researchers** Rob Bauer, Paul Smeets, Paulo Peneda Saraiva, Kees Koedijk, Harry Hummels, and Nils Kok	To design global surveys in order to determine the impact of ESG factors in investors/analysts' decision making.	The retail investor survey sheds light upon the question of why some investors choose SRI funds and why others do not.	This research will yield interesting and important insights for financial service providers: both in the institutional and the individual investor markets. Banks involved in one survey have indicated that they are already using the research results in their marketing strategies for 2010. Mutual funds and banks can profit from the detailed segmentation analysis that we have conducted.
B5 Class-Action Lawsuits, Corporate Governance Mechanisms and CSR **Researchers** Rob Bauer, Robin Braun, and Frank Moers	To shed light upon executive compensation actors' influence on management behaviour in terms of risk taking and securities violations.	One study indicates that manipulating initial public offerings is a profitable method for underwriting investment banks. Is socially responsible behaviour on the part of managers and corporations a sign of managerial integrity? Answer: not necessarily!	Evaluations of firms with steep option incentives, awareness of market manipulation in securities offerings, and more objective definition of CSR with respect to managerial integrity.
B6 Sustainable Development in Swedish Industry **Researchers** Tommy Lundgren, Runar Brännlund, and K-G Löfgren	To add to the existing knowledge about how voluntarily adopted social responsibility codes affects the economics of a firm and their contribution to sustainable development.	Climate policy does not have a significant positive effect upon technological development in Swedish manufacturing. Results show quite the opposite: the CO_2 tax has induced a slowdown in productivity.	The project shed lights upon how internal and external policy actions within the climate area affect Swedish industry in terms of profitability and environmental performance. Uncertainty of the effects of CSR investments may constrain such investments.

Project	Aim	Results	Benefits for Practitioners
C1 Impact of Incentives and Monitoring on Portfolio Managers **Researchers** Tommy Gärling, Martin Hedesström, and Maria Andersson	To determine how changes in how portfolio managers are incentivised and monitored affect their investment decisions.	Portfolio managers who are incentivised on the basis of short-term returns performance is a widespread practice in Sweden. Bonuses are predominately based upon one year intervals. Longer-term bonus components, if offered, are generally of insignificant size.	Counteracting short-termism in the financial sector is expected to help companies manage their business in ways that are more closely aligned with sustainable development. Empirical evidence of whether or not prolonged monitoring intervals affect investment decisions is largely lacking.
C2 Mechanisms for Mainstreaming Sustainable Investments:			
Project	**Aim**	**Results**	**Benefits for Practitioners**
C2.1 Forecasts and News for CSR Firms **Researchers** Leonardo Bechetti, Rocco Ciciretti, and Stefano Herzel	To study the effects of different macro news on CSR and non-CSR stocks.	Using an event study approach, the hypothesis that adopting CSR practices reduces corporate risk will be tested. This is a novel approach to analysing the impact of CSR practices upon corporate financial performance; it avoids endogeneity problems, such as causality appearing when accounting measures are used (for example, on equity, return on assets, etc.)	Do financial markets recognize CSR as adding value? A positive answer to such questions may reduce concerns and encourage companies to pursue CSR practices.
C2.2 Incentive Schemes for CSR Asset Management – a Quantitative Approach **Researchers** Evert Carlsson, Mattias Sundén and Georgios Foufas, Annalisa Fabretti, Taylan Mavruk, and Stefano Herzel	To identify how incentives influence an asset manager's strategy and to design an incentive function in order to convince a manager to invest in CSR assets.	Results thus far indicate that concentrated ownership is an important factor for taking on long-term risks, when it concerns the effects of incentives on long-term behaviour. The research has introduced the concept of CSR to the field of Delegated Portfolio Management. The role of financial incentives has been studied in a number of specific settings.	This research will identify optimal incentives schemes for pursuing CSR (as well as purely financial) objectives.

Project	Aim	Results	Benefits for Practitioners
D1 Institutional Investors' Fiduciary Duties **Researchers** Joakim Sandberg and Tommy Gärling	To assess the extent to which institutional investors' fiduciary responsibilities are, or should be, consistent with (allow for, encourage or even require) sustainable investing.	The UNEP FI reports *A Legal Framework for the Integration of Environmental, Social and Governance Issues into Institutional Investment* (2005) and *Fiduciary Responsibility – Legal and Practical Aspects of Integrating Environmental, Social and Governance Issues Into Institutional Investment* (2009). The preliminary results of our analysis of these reports suggest that such optimism may be premature.	Institutional investor's belief that sustainable investing is inconsistent with fiduciary responsibility is a central explanation of why so few engage in it today. This project will assess whether this actually is the case; that is to say, whether current legislation on fiduciary responsibility can be (re-)interpreted, so that consistency is possible, or how future legislation that achieves greater consistency could look.
D2 Sustainable Governance among Swedish Pension Funds **Researchers** Ian Hamilton, Pontus Cerin, and Lars Hassel	To study how Swedish State Pension Funds (AP-funds) follow the government directive and include environmental and ethical considerations in investment decisions.	Descriptions of how the AP-funds interpret the directive in Prop.1999/2000:46 and how they actually went about implementing responsible investing during 2001-2008.	The institutional investor community recognizes SRI. However, until SRI moves from recognition to practice it will not be considered mainstream. The outcomes of studies in this project are aimed at contributing to mainstreaming environmental and ethical considerations in investment decisions.

Project	Aim	Results	Benefits for Practitioners
E1 Sustainability and Commercial Property **Researchers** Nils Kok and Piet Eichholtz	To investigate corporate governance mechanisms in listed real estate companies. To address how sustainability might add value to property developers and investors.	This project has established a benchmark study with respect to the economic implications of sustainability in the field of real estate investment, both in academia and for the industry. The study also contributes to the optimal design of sustainability labels and energy labels for the real-estate sector.	Sustainability has a distinct influence upon the risks and returns associated with institutional property investments. Besides the fundamental value drivers, investors need to identify and integrate elements of environmental sustainability in property investments.
E2 Sustainable Venture Capital Markets **Researchers** Anders Isaksson and Lars Hassel	To understand how venture capital financing and investment funds can help to catalyze the growth of companies developing new sustainable ventures.	The emphasis thus far has been upon investigating the demand side of venture capital, that is, entrepreneurs and their environmental values and behaviour. A conceptual model of the investor-entrepreneur value gap has been developed and tested empirically.	The research issues addressed in this project aim to facilitate investments made during early stages of developing sustainable technological innovations.
E3 The Role of ESG in Credit Markets **Researchers** Rob Bauer, Jeroen Derwall, and Daniel Hann	To analyze the relationship between environmental, social, and governance (ESG) performance of firms and their credit risk.	Bondholder wealth is affected by the quality of employee relations. Firms with stronger employee relations enjoy: (1) a statistically and economically lower cost of debt financing; (2) higher credit ratings; and (3) lower firm-specific risk. Corporate environmental risk management is significantly negatively associated with the credit risk of firms. More specifically, it was found that environmental proactivism is associated with a lower cost of debt financing and higher credit ratings. In contrast, it was observed that firms that display environmental concerns are subject to higher yield spreads and lower credit ratings.	Information on the environmental and social performance of firms appears relevant for the pricing of bonds, but has so far only received little attention in finance. Human capital constitutes an important competitive asset whose proper management has implications not only for firm performance but also for risk. Similarly, environmental risk management is becoming an increasingly important topic for firms.

Publications

Part A

Guenster, N., J. Derwall, R. Bauer and K. Koedijk (forthcoming), The Economic Value of Corporate Eco-Efficiency, European Financial Management.

Derwall, J. and P. Verwijmeren (forthcoming), Employee Well-being, Firm Leverage, and Bankruptcy Risk, Journal of Banking and Finance.

Derwall, J., K. Koedijk and J. Ter Horst (2009), A Tale of Values-Driven and Profit-Seeking Social Investors, ECCE Working Paper.

Bauer and Hummels (2009), Pension Funds and Sustainable Investment: Return and Risk?, forthcoming in book edited by Prof. Dr. A. Tourani Rad (Auckland University).

Manescu C. (2009), Risk and return implications of corporate social responsibility, Licentiate thesis, University of Gothenburg, June 2009.

Manescu C. (2009), Is Corporate Social Responsibility viewed as a risk factor? Evidence from an asset pricing analysis, University of Gothenburg, Working Paper nr 376.

Manescu C. and C. Belu (2009), Strategic Corporate Social Responsibility (CSR) and economic performance, Cristiana Manescu, University of Gothenburg Working Paper nr 362.

Part B

Sundblad E-L, T. Gärling, A. Biel and M. Hedesström, (2009), Portfolio managers' attitudes towards policy regulations of environmental reporting, Working Paper, SIRP WP 09-03.

Figge, F. & Hahn, T. (forthcoming), Not measuring sustainable value at all: A response to Kuosmanen and Kuosmanen, Ecological Economics.

Kallunki, J-P., Nilsson, H., Hellström, J. (forthcoming), Why Do Insiders Trade? Evidence Based on Unique Data on Swedish Insiders, Journal of Accounting and Economics.

Amir E., Kallunki, J-P. and Nilsson, H. (2009), Personal Character and Firm Performance. The Economic Implications of Having Fraudulent Board Members, Working paper, SIRP WP 09-08, Umeå School of Business.

Natalia S, L.G. Hassel and H. Nilsson (2009), The Value Relevance of Environmental and Social Performance: Evidence from Swedish SIX 300 Companies, conditionally accepted for Accounting and Taxation, Working Paper, SIRP WP 09-04

Natalia S and Lars Hassel (2008), Industry Risk Moderates the Relation between Environmental and Financial Performance, Working Paper, SIRP WP 08-02.

Bauer, R. (2009), Fiduciary Management: A Next Logical Step in the Evolution of Pension Management?, ICPM Case Study, Number 3, Rotman International Centre for Pension Management, University of Toronto.

Lundgren, T. (forthcoming), A micro-economic model of corporate social responsibility, Metroeconomica.

Lundgren, T., R. Olsson (forthcoming), How bad is bad news? Assessing the effects of environmental incidents on firm value, American Journal of Finance and Accounting.

Brännlund, R., T. Lundgren (2009), Environmental policy without costs? A review of the Porter hypothesis, International Review of Environmental and Resource Economics 3, 1-43.

Brännlund, R., T. Lundgren (forthcoming), Environmental Policy and Profitability, Environmental Economics and Policy Studies. Cerin P, Belhaj M. (2009).

Extra Financial Analysis – Environmental and financial performances of ABB, Akzo-Nobel and SCA Picturing the business opportunities and risks associated to stakeholder perceptions and environmental and social prerequisites. CPM Report No. 2009:7. Chalmers University of Technology, Sweden

Part C

Tommy Gärling, Erich Kirchler, Alan Lewis, and Fred van Raaij (2009), Psychology, Financial Decision Making, and Financial Crises, Working Paper, SIRP WP 09-07.

Foufas G., M. Sundén and E. Carlsson (2010), On Incentives for Sustainable Investments, Working Paper, SIRP WP 10-01.

Part D

Sandberg, J. (2009), What are your investments doing right now? Vandekerckhove, W. et al. (eds.), Responsible Investment in Times of Turmoil, Springer.

Cowton, C. and Sandberg, J. (forthcoming), Socially Responsible Investment, in Chadwick, R. (ed.), Encyclopedia of Applied Ethics, 2nd edition, Academic Press.

Hedesström, M. (2010), Incentive systems for stock portfolio managers in Sweden, Working Paper, SIRP 10-02.

Sandberg, J. (2010), Socially Responsible Investment and Fiduciary Duty: Putting the Freshfields Report into Perspective, Working Paper, SIRP WP 10-03.

Part E

Eichholtz, Piet, Nils Kok, and John Quigley (forthcoming), Doing Well by Doing Good: Green Office Buildings, American Economic Review.

Eichholtz, Piet, Nils Kok, and John Quigley (2009), Why Companies Rent Green: CSR and the Role of Real Estate, Academy of Management Proceedings, p1-6.

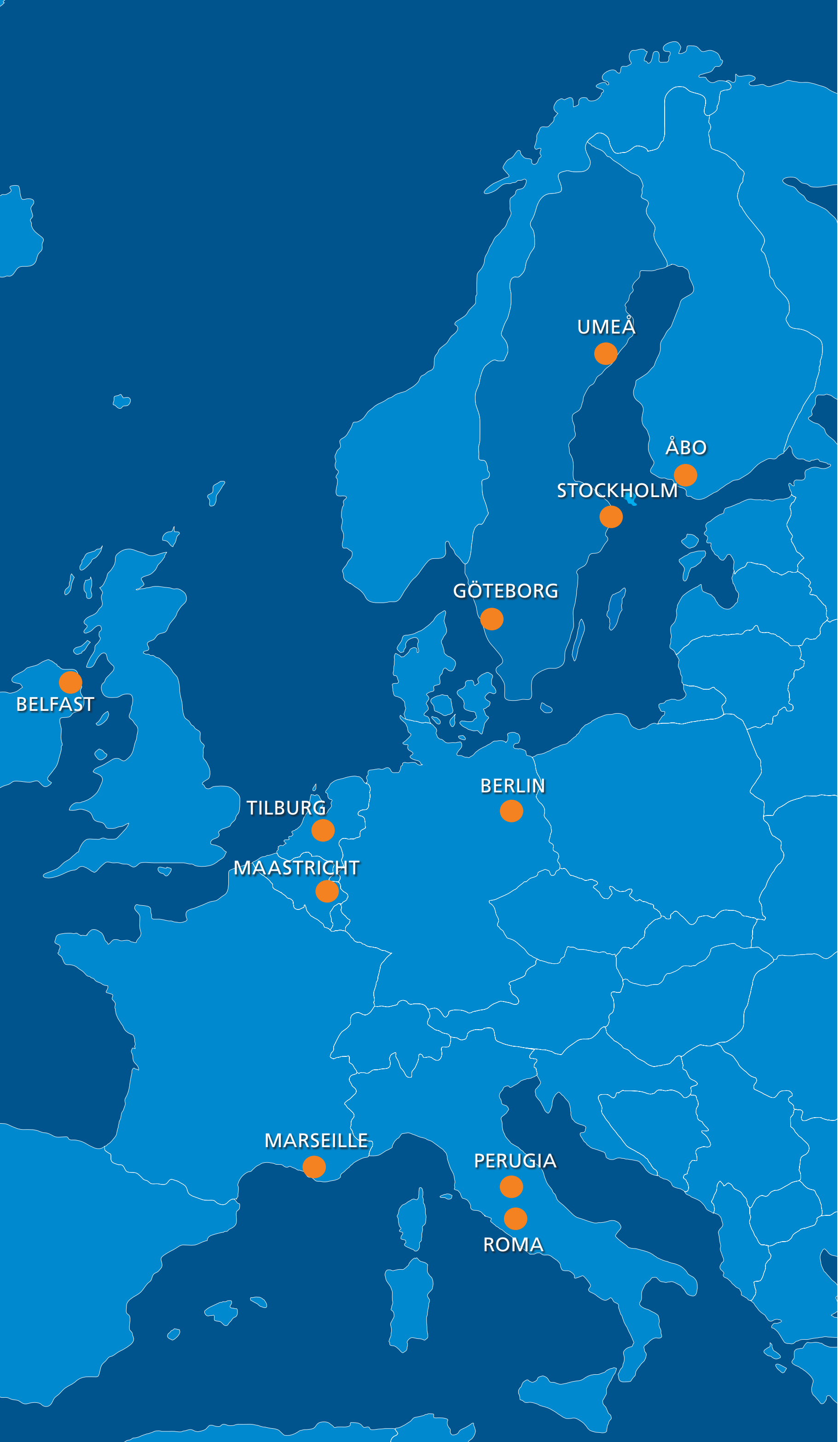
Bauer, Rob, Piet Eichholtz, and Nils Kok (forthcoming), Corporate Governance and Performance: The REIT Effect, Real Estate Economics.

Eichholtz, Piet, Nils Kok, and John Quigley, Who Rents Green: Real Property and Corporate Social Responsibility, ECCE Working Paper.

Brounen, Dirk, and Nils Kok (2009), On the Economics of Energy Labels in the Housing Market, ECCE Working Paper.

Derwall, J and K. Koedijk (2009), Socially Responsible Fixed Income Funds, Journal of Business Finance and Accounting, vol. 36 (1&2), pp. 210-229.

Bauer, R., Derwall, J., and D. Hann (2009), Employee Relations and Credit Risk, ECCE Working Paper.



- An international and interdisciplinary research programme aimed at understanding how sustainable investment practices can add value to investors and identifying barriers for such practices to becoming mainstream.
- Umeå School of Business is the host for the Sustainable Investments research programme and is responsible for coordinating the various projects.
- The research covers multiple academic disciplines including finance, economics, accounting, psychology, management and statistics.
- A Mistra-funded research programme with a budget of 103 million SEK for the period 2006–2012.
- A board oversees the programme, with a view to promote research that is relevant for practitioners. Board members are: Lars Gavelin, Senior Advisor at the Swedish Ministry of Finance (Chairman), Helena Levander, CEO, Nordic Investor Services, John Howchin, Senior Analyst, Norges Bank Investment Management, Måns Lönnroth, Independent consultant and Rob Lake, Head of Sustainability, APG Investments.

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