Chaire Finance Durable et Investissement Responsable

Main achievements of the Chaire FDIR

Since its inception in 2007, the Chaire "Finance Durable et Investissement Responsable" (Chaire FDIR) has made significant contributions to the understanding of socially responsible investing and corporate social responsibility. The major achievements of the Chaire FDIR span various domains including producing research, communicating new results to the sustainable development community as well as to a larger public, and training future finance professionals. This document presents a synthesis of these achievements. Moreover, it gives some information regarding the projects that are currently being undertaken within the Chaire FDIR.

1. Research Achievements in 2011

The Chaire FDIR has made significant progresses in the understanding of Socially Responsible Investments (SRI) and Corporate Social Responsibility (CSR). These progresses have implications for various areas within the responsible finance industry. After 5 years of research efforts, the results of the Chaire FDIR can be usefully applied to:

- Marketing, for the design of new SRI products as well as communication campaigns towards clients and prospects;
- Asset management, for the design of investment strategies that can boost financial performance and induce change in corporate behavior;
- Extra-financial as well as financial analysis, for designing measures of CSR and identifying key extra-financial drivers of economic performance;
- Governance of responsible firms and funds, for designing efficient mandates for managers.

More information is provided below on these various contributions. Research contributions of the Chaire FDIR are organized along the main topics of interest identified in the February 23rd, 2010 document prepared by the sponsors of the Chaire. These topics include: the definition, measure and impact on performance of corporate social responsibility (CSR), the nature of the demand for SRI, the means to induce firms to reduce externalities, the relevant ESG indicators, the engagement of investors towards firms, the issue of BOP and long-term growth activities, and the governance and SRI policies of institutional investors.

1.1. The definition, measure and impact on performance of CSR

The Chaire FDIR has contributed to fix ideas in a long-standing debate on the nature of CSR. A standard definition of CSR is that it is about sacrificing profits in the social interest. For there to be a sacrifice, the firm must go beyond its legal and contractual obligations, on a voluntary basis. Why do corporations empower themselves and substitute for elected government? According to the Chaire FDIR, a first and clearly relevant motivation is that government may itself fail. Government failures have multiple origins: capture by lobbies and other interest groups, territoriality of jurisdiction, and a combination of high transaction costs and poor information. A second important motivation is that economic agents may want to promote values that are not shared by lawmakers. Because preferences are heterogeneous, it is inevitable that some consumers, investors or workers' values will not be fully reflected in policy. They, or organized groups acting on their behalf, will then become activists.

Another important element lies in the definition and measurement of responsible investment across asset classes with a focus on private equity. Private equity consists of investments in unlisted companies and is generally only available to institutional investors, venture capitalists, and high-net-worth individuals. From this perspective, the Chaire FDIR has analyzed how CSR information may impact the valuation of small capitalizations and unlisted firms, thereby contributing to an emerging literature and a growing concern of responsible investors.

1.2. The nature of the demand for SRI

The demand for socially responsible funds arises from two types of investors: institutions, such as pension funds or sovereign funds, and individual investors. These different investors may have very different underlying motivations. Institutions' rationale for investing in SRI may derive from political issues, reputation concerns, or the fear of pecuniary externalities within firms in well-diversified long-horizon portfolios. Individual investors may be inclined to invest in SRI for psychological reasons related to altruism or to self-image concerns.

Institutional investors usually have a long-term horizon and invest in a large portion of the assets available in financial markets. According to the Chaire FDIR, investing in firms with sound CSR policies can alleviate issues related to the existence of limits to governance and managers' temporal horizons. Investments in CSR can turn out to be beneficial, not only for society but also for investors themselves. As a large literature in finance has emphasized, firms often suffer from a short-term bias. To the extent that SRI funds push forward the need to implement CSR policies, these funds can contribute to overcome the short-term bias in firm's decisions. This suggests that socially responsible investors should position themselves as long-term investors who monitor management and exert voice to correct short-termism. Moreover, this indicates that an SRI policy for an institutional investor can perfectly be in line with its fiduciary duty.

From an individual investor point of view, investing in SRI funds falls in the domain of prosocial behavior. The research of the Chaire FDIR sheds some light on the complex mix of interdependent motivations that underlies prosocial behavior and can thus be helpful to better understand the demand for SRI funds. Investing in SRI funds may be driven by various non-exclusive factors ranging from genuine altruism to the hope of good financial returns and to social image concerns. This has important consequences for SRI funds. Better knowing their clients' motivation will help them improve their communication policies as well as the design of their products.

Individual investors' demand for SRI funds is also likely to be influenced by trust. The Chaire FDIR argues that adopting SRI criteria in their investment policies has a positive impact on investors' trust towards funds. Experimental results indicate that the perceived trustworthiness of an investment fund depends on the values promoted by the fund. Importantly, it is not enough for a fund to label itself as socially responsible in order to benefit from investors' trust. The fund has to be explicit regarding its basic socially responsible policies and investors' trust will increase with the degree of similarity between the values of the fund and those of investors. In other words, the more investors share the values promoted by a fund, the higher their level of trust towards the fund. To the extent that different investors have different values, this result calls for the creation of specialized funds that can cater to different investment segments.

From the perspective of the SRI market, the chaire FDIR also analyzes how the demand for SRI may be influenced by SRI mainstreaming on the one hand, and SRI labels on the other hand. Several SRI labels have indeed merged in the past decade on the SRI market, and their relationship with the efficiency of the SRI retail market in France has been analyzed.

1.3. The means to induce firms to reduce externalities

Apart from a government intervention to impose taxes or offer subsidies and to organize emissions' markets, the Chaire FDIR has shown that best-in-class investment strategies that are used by many SRI funds can lead to the adoption of CSR oriented policies by firms. A best-in-class strategy consists in over- or under-weighting assets according to the level of CSR of the issuers. The Chaire FDIR shows that this SRI strategy can have a significant effect on firms' behavior because it increases the equilibrium cost of capital of firms that are poor in terms of CSR. In this case, shareholders naturally favor CSR oriented strategies (even if these are detrimental to the purely economic performance of the firm) because these strategies maximize asset prices.

Implications for various CSR issues can be derived. Consider, for example, the climate change issue. In the Stern Review (2007), the damage generated by the emission of greenhouse gases in the business-as-usual scenario is estimated to be equivalent to an immediate and permanent loss of the world GDP by an amount comprised between 5% and 20%. At the same time, Stern estimates that most of these consequences could be eliminated by an immediate and permanent sacrifice of 1% of the world GDP, invested in alternative/new technologies to reduce emissions. Thus, for the application of climate change, we can estimate the ratio immediate cost to future benefit as being somewhere between 5% and 20%. The analysis of the Chaire FDIR suggests that social efficiency could be obtained if the proportion of SRI investors is larger than this ratio.

Considering the global challenges of sustainability that the demand for SRI might address, climate change and green growth strategies are also examined from the firms' and investors perspective. In particular, the research conducted in the chaire FDIR challenges the importance of international negotiations on climate and its impact on strategies for CO_2 mitigation.

Finally, in various sectors, several other CSR strategies deserve close attention for responsible investors. In the agri-food sector for instance, the emergence of endogenous norms and standards, or the strategies adopted by firms with respect to GMOs may affect the demand for SRI. From this perspective, the chaire FDIR develops both theoretical and empirical analyses examining which type of regulation should be favoured, and how different regulations affect various interest groups.

1.4. The relevant ESG indicators

SRI and CSR heavily depend on financial as well as extra-financial analysis. The quantitative tools for financial analysis have been developed in the last 50 years or so. A growing literature is now focusing on creating the quantitative tools for extra-financial analysis. In particular, this literature enriches the cost-benefit approach by considering alternative preferences and new interactions between the various economic, social and environmental consequences of firms' and governments' policies. These studies should ultimately prove useful to guide SRI analysts in their effort to merge financial and extra-financial information.

A first important ESG factor relates to the security of the working environment in firms. It is sometimes difficult to assess with precision the risks to health and life that workers face. For instance, there is often conflicting information about the likelihood of dying from new environmental or technological risks. A case in point is offered by the asbestos (amiante) that is one of the greatest causes of work-related deaths. Due to the scientific uncertainty over the impact of asbestos, it is difficult to predict the number of fatalities that it will induce. How do people react to the uncertainty over the probability of dying from a specific risk? Answering this question is crucial to offer an objective valuation of the value of life-threatening externalities. The Chaire FDIR shows that the existence of ambiguity over baseline mortality risks increases the value of a statistical life when the decision maker is averse to ambiguity. Existing estimations of the value of statistical life in developed countries range from $1 to $10 million. The analysis of the Chaire FDIR supports the view that, when using these estimates to assess the future value of project with life-threatening externalities, an extra-financial analyst should favor the higher part of the interval.

A second important ESG factor is related to the value of environmental externalities. What is the value today of a project that has positive financial and ecological consequences? This is a central question for extra-financial analysts and is relevant for a wide set of environmental contexts, such as global warming, nuclear wastes, and biodiversity. Its answer depends upon our expectations about the quality of the environment and about the level of economic development that future generations will face when the project returns (both financial and ecological) will materialize. The Chaire FDIR proposes to use two different discount rates when evaluating the financial and ecological consequences of a project. The financial discount rate is the tradional interest rate that is used in computing the net present value of a project. The ecological discount factor associated to a given date is the immediate sure environmental impact that has the same impact on welfare as a unit environmental impact at this later date. This method is simple because one does not need to compute certainty equivalent future values of environmental impacts. As an example, the Chaire FDIR has applied the model to the issue of biodiversity. Using data about the link between biodiversity and economic development, he indicates that projects' consequences on biodiversity should be discounted at a rate of 1.5%, whereas projects' financial returns should be discounted at 3.2%. Consider for example the case of an analyst whose objective is to assess the value today of a project that generates in 30 years a positive economic cashflow worth $1,000 and a negative ecological cashflow of $600. Because the ecological discount rate is much lower than the economic discount rate, the present value of the project is actually close to zero (from a social point of view)!

Finally, the nature of synergies and interactions among the various ESG criteria is also analyzed in order to determine what type of ESG policy mix is valued by investors on financial markets. This issue is all the more important as no consensus has yet emerged so far on ESG integration and value creation. The chaire FDIR contributes to this literature by analyzing which ESG factors combination leads to financial performance in Europe.

1.5. The engagement of investors towards firms

To better understand the potential impact of SRI funds on corporate behavior, it is interesting to study investors' engagement strategy and impact. The Chaire FDIR has analyzed the impact of shareholders' engagement on firms' value. They show that, when a CSR resolution is adopted, firms will experience a positive stock price reaction if the adopted CSR policy does not impede too much economic performance, and if the potential improvement in CSR and the strength of the consensus around the particular CSR issue at stake are high enough. This shows that, in some circumstances, there is a corporate social responsibility (CSR) premium associated with the fact that a company has a higher level of CSR.

Policies tilted towards CSR are more likely to be adopted when the number of SR funds and the potential CSR improvement are high enough, and when SRI funds' risk aversion and undiversifiable risk are low enough. This is because socially responsible investors hold a sizable fraction of firms' capital that enables them to influence firms' decisions through dialogue or vote at shareholders' meetings. However, when SRI funds do not hold a significant portion of firms' shares, CSR policies are not adopted. This raises the possibility of a large socially responsible raider's intervention. This raider can buy and hold non-responsible firms' shares in an attempt to build a majority in favor of the CSR policy. If he is not too risk-averse, the raider succeeds in acquiring a controlling block. The CSR policy is then adopted. This can be associated with a positive abnormal return for the socially responsible raider if he is able to sell back part of the socially responsible firm and to pocket in the CSR premium. It is interesting to notice that a pure financial raider cannot successfully implement such a strategy and rip the premium. Indeed, such a raider would like to announce that he will vote in favor of the CSR policy but this announcement is not credible. SRI funds are thus not ready to pay the premium when buying the firm's share. As a result, the purely financial raider does not display abnormal returns.

Overall, this analysis suggests that there are two ways SRI investors' engagement can affect firms' CSR policies. On the one hand, SRI investors can generate abnormal returns if they can influence a firm's strategy through negociation and voting at general assemblies. This strategy generates abnormal returns in the long run if the positive financial results of CSR policies materialize in the long run. On the other hand, an SRI private equity fund can also generate positive abnormal returns in the short- run by investing in non-responsible firms and turning them into responsible. This analysis suggests that doing well by doing good is not reserved to firms but is also amenable to SRI funds. Through this research, the Chaire FDIR has made a major contribution to the business case of SRI.

A study performed by the Chaire FDIR offers results that could prove useful to design engagement strategy. This paper does not look at shareholders' engagement per se (for which there is little data available at this point) but instead focuses on the impact of the stringency of environmental regulations. In a sense, regulations can be viewed as affecting firms' environmental policies just as engagement could. Results could thus be relevant to estimate the impact of a stringent request to improve environmental performance coming from shareholders. The research of the Chaire FDIR uses survey data on 4200 production facilities from 7 OECD countries (Canada, France, Germany, Hungary, Japan, Norway, and the US). They show that a 1% increase in the probability to have a stringent environmental regulation increases by 0.04% the probability for a firm to make environmental R&D investments and 0.02% percent the probability for a firm to be profitable. Interestingly, this result suggests that engaging corporations regarding environmental R&D could be beneficial for SRI funds. However, the analysis of the Chaire FDIR indicates that the overall effect of stringent regulations on profitability is negative due to a large direct financial cost of compliance. The lessons for SRI funds is that the cost of engagement (for the funds themselves but also for the companies being engaged) should be i) taken into account before deciding whether an engagement campaign is desirable, and ii) monitored closely once a campaign has started. The evidence offered by the Chaire FDIR indeed shows that compliance costs can exceed the financial benefits derived from enhanced environmental performance.

Finally, to examine the importance of shareholders' engagements in the promotion of long run and good governance practices, an important effort is undertaken in the chaire FDIR to examine the relationship between governance and performance. In particular, the role of boards of directors, as an essential layer between investors, shareholders and managers is investigated. Independence, quality and rewards of directors as well as managers are the center of interest if this research, showing the multiple facets in the governance-performance debate.

1.6. The issue of BOP and long-term growth activities

Responsible investors are confronted to various investment strategies in emerging markets. One of them relates to « Bottom of the Pyramid » (BOP) strategies, suggesting that multinational firms may make revenues while alleviating poverty. Such a BOP concept has received a lot of attention recently but still needs theoretical foundations and empirical validity. The chaire FDIR studies several firms' projects within the BOP markets, highlighting the capacities necessary to succeed together with the learning and innovation challenges posed by such strategies.

1.7. The governance and SRI policies of institutional investors

SRI funds often promote long-term objectives. The Chaire FDIR argues that, for this objective to be achieved, a proper incentive structure needs to be offered to the fund managers. As in the case of firm managers, fund managers compensation is linked to short-term as well as long-term portfolio performance. A widespread view in the financial industry is that relying on short-term performance makes it harder to implement a long-term strategy. For instance, an SRI fund manager reports "The big difficulty is that a lot of the reputational issues and environmental issues play out over a very long period of time [...] and if the market isn't looking at it you can sit there for a very long time on your high horse saying 'this company is a disaster, it shouldn't be trusted 'and you can lose your investors an awful lot of money... " (Guyatt (2006)). Proper compensation schemes in SRI funds need to strike the appropriate balance between short-term compensation, necessary for the manager to meet his or her consumption needs, and long-term compensation, necessary for the manager to embrace a socially responsible perspective.

A growing body of literature shows that stock prices do not fully reflect environmental, social, governance and other intangible assets such as R&D expenditures. These empirical results are often interpreted as evidence of market inefficiencies due to the intangible nature of the information under study. The Chaire FDIR offers an alternative hypothesis based on the long-term nature of the information under study (the operational items cited above are more likely to improve long-run than short-term financial performance). They argue that the slow incorporation of information is a result of stock market short-termism due to short-term compensation. Short-term compensation is inevitable unless fund managers are patient and share the long-term prosocial inclination of the fund. To be performing well and fulfill their long-term fiduciary duty, SRI funds would thus be well inspired to recruit managers with strong personal prosocial orientations.

Finally, an empirical analysis of how institutional investors who are member of the long-term investor club integrate ESG factors into their investment strategies has been conducted. Results highlight a convergent vision of ESG integration but heterogeneous practices suggesting complex interactions between long term investing and ESG integration.

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2. Communication of the Chaire FDIR achievements

The advances made by the researchers of the Chaire FDIR have been presented to a wide audience including academic researchers, finance practitioners, and the general public, both in France and abroad.

2.1. Books

The chair has been involved in two books, one that came out in 2010, and one forthcoming at Princeton University Press.

Corporate Social Responsibility: from Compliance from opportunity (P. Crifo & J.-P. Ponssard eds, Editions de l'Ecole Polytechnique, 2010) summarizes the chair's research output in four areas. i. what lessons can be drawn from the crisis in terms of governance and financial stability? ii. Where do we stand regarding the link between CSR and the financial performance of the firms? iii. How do firms manage new sectoral risks such as climate change, nutrition and health? iv. How and at what cost do firms interact with the communities with whom there are intermeshed in the developing world?

The economics of discounting and sustainable development (Christian Gollier, Princeton University Press, 2012)

Many books have described how civilizations rise, flower and then fall. Underlying this observed dynamic are a myriad of individual and collective investment decisions affecting the accumulation of capital, the level of education, the preservation of the environment, infrastructure quality, legal systems, and the protection of property rights. This vast literature from Adam Smith's Wealth of Nations through Gregory Clark's Farewell to Alms to Jared Diamond's Collapse is retrospective and positive, examining the link between past actions and the actual collective destiny. In contrast, this book takes a prospective and normative view, analyzing the problem of investment project selection. Which projects should be implemented to maximize intergenerational welfare? The solution to this problem heavily relies on our understanding and beliefs about the dynamics of civilizations.
Life is full of investment decisions, trading off current sacrifices for a better future. This book examines the economic tools that are used to evaluate actions that entail costs and benefits that are scattered through time. These tools are useful to optimize the impacts of our investments both at the individual and collective levels. It presents the fundamental quantitative tools to evaluate the social responsibility of projects and companies.

2.2. Communication to academic researchers

The researchers of the Chaire FDIR have been invited to share their work and ideas in various academic conferences and workshops.

Examples of academic conferences

- Finance and Responsible Business conference at the University of California, Berkeley, November 2011
- Association of Southern European Economic Theorists (ASSET), Evora, Portugal, October 2011
- XIIIth Congress of the European Association of Agricultural Economists, Zurich, Switzerland, August 2011
- European Association of Environmental and Resource Economists Conference, June 2011
- International Conference on Corporate Social Responsibility, Mines Paristech, Paris, June 2011
- Alliance for Research on Corporate Sustainability Conference, Wharton, University of Pennsylvania, May 2011
- Annual Meeting of the American Economic Association, Denver, January 2011
- World Congress of the Econometric Society in Shangaï, August 2010
- Symposium of the Resources for the Future and Sustainable Prosperity in Montreal, June 2010
- Conference on Managing Climate Change at the Collège de France, June 2010
- ECCE conference on CSR and SRI at the University of Maastricht, September 2009
- London School of Economics Coase Lecture, February 2009

Examples of workshops and colloquiums

- Workshop « Governance and ethical finance », IPAG December 2011
- Colloque Finance et Développement Durable, Cercle DD/RSE, December 2011
- Premières rencontres parlementaires sur la croissance verte, November 2011
- Conference FEDERE les Echos, October 2011
- Journées Futuris- ANRT, September 2011
- Conférence Ingénieurs sans frontières–Paris Sud, Ecole Polytechnique, June 2011
- Campus du C3D July 2011
- Stage ISST Croissance et développement en IDF, June 2011
- Séminaire SERECO, EDF R&D May 2011
- Premier séminaire national RSE, Assemblée nationale Paris April 2011

2.3. Communication to finance practitioners

The Chaire FDIR has organized various events during which researchers have presented the implications of their results for CSR and SRI. These events include:

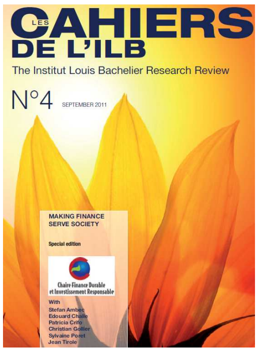
- Around 15 workshops hosted by the Association Française de Gestion Financière (AFG) on various topics ranging from corporate governance to financial markets' short-termism (for more details about contents: www.idei.fr/fdir)
- Four annual conferences of the Chaire FDIR attended by several hundreds of practitioners:
  . The inaugural conference in Paris in January 2008
  . The first IDEI/Chaire FDIR conference in Toulouse in May 2009
  . Annual conference in January 2010
  . Annual conference in October 2011

List of recent meetings, workshops and conferences organized by the chaire FDIR

- Workshop « SRI in bond markets », February 2012 (scheduled)
- Workshop « Governance and engagement », February 2012 (scheduled)
- Meeting « Gouvernance », June 2011
- Meeting « Obligations et ISR », June 2011
- Meeting « Motivation des investisseurs pour l'ISR », June 2011
- Workshop « SRI Labels », june 2011
- Meeting « Consequences of shareholder engagement », June 2011
- Workshop « Financial markets, investment strategies and responsible finance », May 2011
- Workshop "Sustainability & Impact Challenges at the Base of the Pyramid" February 2011
- Workshop « Are high compensations legitimate? », November 2010
- Workshop « Environment, sustainable development, and investors' confidence », October 2010
- Workshop « CSR and SRI: mainstreaming, communication & performance », June 2010
- Workshop « Financial markets, investment strategies and responsible finance », May 2010
- Workshop « Financial instability & governance: lessons from the crisis », January 2010

2.4. Communication to the general public

The ideas elaborated within the Chaire FDIR have reached a broad audience via articles and communications on national business and economic newspapers and magazines including *Les Echos*, *Le Monde*, *Regards croisés sur l'économie*, *La Tribune*, and *Les Temps Modernes*.



A new publication has been launched by Institut Louis Bachelier: **Institut Louis Bachelier Research Review (les Cahiers de l'ILB).** A special edition of Institut Louis Bachelier Research Review for the Chaire FDIR has been published in 2011, both in French and English. This special edition entitled "Making Finance Serve Society" has been realized based on articles of the Chaire FDIR research team by Stefan Ambec, Edouard Challe, Patricia Crifo, Christian Gollier, Sylvaine Poret and Jean Tirole.
A second special edition of Institut Louis Bachelier Research Review for the Chaire FDIR will come out **in 2012**.

Moreover, in 2010 the chair launched its new website (**http://www.idei.fr/fdir/**), summarizing in a user-friendly manner all the realizations of the chair's researchers since its inception in 2007. The website is meant both for internal use and external communication of the chair's achievements. Among other things, the website contains

- All supporting documents to the workshops organized by the chair
- The annual reports of the chair
- The chair's update, summarizing the chair's activities and realizations

3. Education and training

The Chaire FDIR has been pivotal in fostering the diffusion of knowledge on CSR and SRI within the young generations of finance practitioners and researchers. State-of-the-art techniques and ideas of CSR and SRI have been taught in various courses offered to masters in Economics and Finance at the Ecole Polytechnique, at the Toulouse School of Economics, and at the Institut d'Administration des Entreprises (IAE) of the University of Toulouse. Moreover, a dozen of PhD students have been working on the important issues of the Chaire FDIR.

3.1. Courses

- Master in Finance, IAE (University of Toulouse): Asset Management and SRI (12h)
- Master of International Management, IAE (University of Toulouse): International finance and Corporate Social Responsibility (15h)
- Diplôme Universitaire Audit Social et Audit de la Responsabilité Sociale des Entreprises, Chambre des Salariés du Luxembourg: Investissement Socialement Responsable (in coopération with University of Toulouse)
- Master Financial Markets and Intermediaries, Toulouse School of Economics: Economics of risk and insurance: taking into account the long-term impacts of investments (27h)
- Master in Environmental and Natural Resources Economics, Toulouse School of Economics: Environmental Economics (27 h)
- Master in Environmental and Natural Resources Economics, Toulouse School of Economics: Sustainable Development (15 h)
- Master of Public Affairs, Sciences Po Paris: Cost-Benefit Analysis and the measure of externalities (12h) (by Nicolas Treich, a research of the Chair)
- Master EDDEE (X, Agro, Mines, Université Paris Ouest…): Corporate Social Responsibility (20h)
- Master DET (Univ. Paris Ouest Nanterre): Governance and Sustainable development (20h)

3.2. PhD Students

Former PhD students of the Chair FDIR who have already defended include:

- Samer Hobeika: ISR, from the households to long-run institutional investors, defense on December 2011 (JP. Ponssard advisor)
- Johannes Emmerling: Social responsibility and social inequalities, defended in November 2011 (C. Gollier advisor)
- François Perrot: Poverty in developing coutries and SRI, defense on September 2011 (JP. Ponssard & P. Crifo advisors)
- Johannes Gierlinger: Valuing long-term investments with scientific uncertainty, defended in December 2010 (C. Gollier advisor)
- Delphine Prady: Extra-financial information used by traditional investors, defended in October 2010 (Paul Seabright advisor)

The defended theses are available upon request from the Chairs' co-directors.

Current PhD students of the Chair FDIR include:

- Thomas André: BOP strategies and extra-financial performance, started in September 2011 (JP. Ponssard & P. Crifo advisors)
- Liviu Andronic: Extra-financial information and financial forecasts, started in September 2010 (S. Pouget advisor)
- Vassili Vergopoulos: Behavioral aspects of long-term investments, started 2010 (C. Gollier advisor)
- Claire-Marie Bono: Fiscal reforms under environmental constraints, started in 2009 (E. Challe advisor)
- Marco Heimann: Trust and socially responsible investments, started in September 2009 (S. Pouget advisor)
- Vanina Forget: Private equity and sustainable development, defense expected in October 2012 (P. Crifo advisor)

4. Research projects for 2012

Beyond the main research topics listed in the document of February 2010, the researchers of the Chaire FDIR in conjunction with the sponsors have defined three high-priority empirical research projects. These projects are related to the motivations for socially responsible investments, to the SRI bond markets, and to the governance of socially responsible firms. These three research topics are briefly presented below.

4.1. The motivations for socially responsible investments

What determines the demand for SRI products? The asset management industry is currently confronted with some difficulties to collect new savings. In light of these difficulties, SRI products can constitute an interest way of retaining clients or of obtaining new ones. To test these ideas, this project proposes to empirically study the motivation of French investors for SRI products.

Preliminary research done by the researcher of the Chaire FDIR is based on methodologies developed by social psychologists. It shows that the higher the similarity between the values expressed by funds' investment policy and those expressed by investors, the higher is investors' trust toward the funds. Values being surveyed dealt with Environmental, Social, and Governance (business ethics) issues. This research concerned partly American laypersons.

In this project, we plan to deepen our understanding of these issues by studying French investors and by looking at whether trust actually converts into higher actual investments. We propose to collaborate with the sponsors of the Chaire FDIR in order to run advance this project further. The idea would be i) to submit a questionnaire to their clients, both SRI and traditional, ii) to measure their values, and iii) to let these clients participate in an investment game. This would enable us to study the link between value similarity, trust, and investment propensity. Currently, more than a third of the asset managers that belong to the Chaire FDIR have expressed their interest for this project.

The expected end product is a research article that would be largely diffused in the academic community. In addition, empirical results, for each participating asset management institution, will be communicated with more precision.

4.2. The SRI bond market

The largest asset markets around the world are by far the bond markets. Surprisingly, little is know about the SRI bond markets. The Chaire FDIR will strive to shed some light on important issues related to this topic.

The first issue is related to the choice of ESG criteria that should be used to evaluate corporate debt. Should the criteria be the same as the ones used to evaluate equity? This is not clear at all given that conflicts of interest can emerge between shareholders and bondholders. A related question of interest is to study whether it is always socially responsible to give more power to shareholders.

A second issue is related to the evaluation of the social responsibility of sovereign states. What indicators can be used to evaluate this responsibility? Is the level of social responsibility related to the level of sovereign debt issued by a state? One could think that relevant indicators could be designed for health, poverty, access to education, environment, and human rights. An important issue regards the way on can account for the differences between rich and poor countries.

A third issue concerns the social effectiveness of public expenditures of a state. This point is crucial. Indeed, a poor country that spends resources effectively should be better evaluated than a rich one that does not. To address this issue, one should try and design a way to measure the social effectiveness of public spendings. This entails taking into account externalities (environmental, educational, judicial…) as well risk prevention over a long horizon (discounting rate? Short termism of politicans?).

A fourth interesting issue is related to the socially responsible level of public debt. The criteria Debt over GDP is often used in practice but has a lot of drawbacks. Does this socially responsible level of debt depend on the growth prospects of a state? Should the amount of debt be corrected by the value of the physical and human capital held by the state?

In order to get a good understanding of the state-of-the-art results regarding the link between ESG factors and bond investment performance, the Chaire will organize, in February 2012, a worshop that will gather the three most widely recognized international researchers of these issues. These researchers will present their most recent empirical methodologies and results.

4.3. Governance

How to measure the quality of governance? How can one identify "favorable" governance structures that are conducive to good accounting, financial and extra-financial performance, and distinguish them from more "unfavorable" such structures? Relative to the large amount of studies that have established a connexion (or lack thereof) between governance quality and firm performance in the US, there is a surprising paucity of such work regarding French firms.

The purpose of this project is to fill this gap identify alternative sources of French data about the relevant governance indicators, to merge those data into a single database, and to identify econometrically the causalities running from governance to performance (or the other way around.) Of particular importance within the debate on governance quality is the issue of the composition of the Board of Directors and its potential impact on the efficiency of the firm. Most existing empirical studies have used US data and have led to unconclusive results (in the sense of finding an absence of statistical link between board independence and firm performance, or even a negative effect). However, there are strong specificities in the way Boards operate across the two countries, so it is key to analyze this issue with a large and well defined universe of French firms. Moreover, factors other than independence might either on their own or via interaction effects also impact firms' performance. For example, gender diversity within the Board, internationalization of the Board, expertise (be it general like accounting, or sector-specific), are all likely to affect the effectiveness of the Board at advising and controlling managers.

For this project, several professionals have been contacted in order to use avaible existing data: AFG, the sponsors of the chair FDIR, and other proxy firms specialized on governance. The most comprehensive and exploitable database has been obtained thanks to a partnership with Proxinvest. This database contains information on the composition of boards of the SBF250 index list over the years 2000s. A second database, currently in

negotiation, containing more accurate information on directors expertise for the SBF250 as well, will probably be available thanks to a partnership with Ethics and Boards.
An important stake will be to match these data with performance indicators and create exploitable variables. This may be the subject of a future PhD.

4.4. Shareholder engagement

When analyzing the determinants and consequences of shareholder engagement, a complex set of questions are concerned. What are the motives for engagement? What are the different types of engagement policies developed by shareholders (what type of dialogue and voting policies…)? Do engaged shareholders cooperate with each others? What is the link between shareholder engagement and extra-financial evaluation and performance? What themes of engagement are privileged among the main ESG factors? What is the impact of engagement policies on extra financial performance, investment/disinvestment etc.?

The objective here is to provide answers to these issues by examining specifically the impact of engagement policies and dialogue between shareholders and managers. Two recent studies by Novethic and ORSE in 2011 characterize engagement policies among shareholders from a very aggregate perspective. One trend that seem to emerge from these studies is that shareholder engagement has developed recently over the past decade, but no consensus yet exists on the definition, means of action and impact of such an engagement policies. Such strategies would be complementary to responsible investment practices because a comprehensive dialogue on ESG risk and opportunity between shareholders and managers might favor investment (and less dialogue might refrain from investing), but no study has identified so far the impact of engaged shareholders on investment and firm valuation. It is thus interesting to analyze more deeply the consequences of engagement policies.

From this perspective, engagement in non-listed firms, which are much harder to observe and characterize, would be an interesting application. A research project has hence started in 2011 to analyze the impact of engaged shareholders in non-listed firms. The goal of this project is to quantify the value for engaged shareholders of information on extra-financial performance with respect to environmental, social and governance factors. In partnership with the French Private Equity Association, filed data are collected, involving professional investors, in order to determine the impact of engagement with respect to ESG criteria on firm valuation.

5. Scorecard of research

Theme	Projects	Advancement
The definition, measure and impact on performance of CSR	Measure and impact of CSR in the private equity sector: *Forget, Crifo, Teyssier* The rationale for CSR and SRI: *Tirole* The factors that affect the valuation of CSR including risk and ambiguity: *Gollier, Treich* Evaluating Porter hypothesis: *Ambec*	Several working papers, several published articles, 1 PhD in progress, to be defended in October 2012
The nature of the demand for SRI	SRI mainstreaming and SRI labels: *Crifo, Hobeika, Arjaliès* Similarity in Values and the Perceived Trustworthiness Of Investment Funds: *Heimann, Pouget*	Several working papers, several published articles, 2 PhD completed: 1 PhD defended on December, 16 2011 (Hobeika), 1 PhD defended in June 2010 (Arjaliès), 1 PhD in progress
The means to induce firms to reduce externalities	Firms strategies towards climate change: *Ponssard, Arjaliès* Standards, norms, GMOS in the agri-food sector: *Giraud-Heraud, Poret* Investing for Change: Profit from Responsible Invest.: *Landier* Asset pricing and Corporate Behavior with SRI: *Gollier, Pouget*	4 article in progress, 1 PhD defended in June 2010 1 book published
The relevant ESG indicators	What type of ESG policy mix is valued by investors*: Crifo & Cavaco* The value of life-threatening externalities: *Treich* The value of environmental externalities: *Gollier*	1 working paper, 1 artcile in progress, several published papers

The engagement of investors towards firms	Governance and board composition (independence and expertise): *Crifo, Challe, Cavaco, Reberioux* The business case for SRI private equity: *Gollier, Pouget*	3 articles in progress, 1 Research internship for a master student (master EDDEE april - july 2012), 1 PhD project to be started (in case the student is financed) in September 2012
BOP and long term growth activities	BOP: *Perrot, Andre*	Several published articles, 1 PhD defended on september, 23 2011 (Perrot). 1 PhD starting in late 2011
The governance and SRI policies of institutional investors	ESG integration by long term investors: *Hobeika* CSR, investment capacity and multi-tasking agency relationship: *Biais, Casamatta, Mariotti* Financial market short-termism and the mandates of SRI fund managers: *Casamatta, Pouget*	Several working papers