

## **IdR FDIR 2019-2021**

### **Research Projects**

As decided on April 4, 2019 during the general assembly meeting of the Association FDIR, the researchers of the FDIR in conjunction with the sponsors have defined four high-priority research projects for the years 2019-2021. These projects are transversal to the main research topics listed in the document of February 2010. These projects are also related to the three priority topics that have been defined in the 2014 general assembly meeting and that deal with corporate governance, engagement, and the opportunities and risks in long term investments. The precise research projects are presented below.

#### **Project 1: Employees as directors (coordinated by Catherine Casamatta, TSE and Sébastien Pouget, TSE)**

Should employees be associated with the management of the firm that employs them? What is the impact on firm value of having employees seating at the board of directors? The objective of this project is to exploit recent changes in the French Law to shed light on these long-standing issues.

There are different reasons why the participation of employees at the board of directors can affect firms' strategy, and their resulting market value. For instance, employee's board participation can help overcome CEOs' short-termism and allow the firm to implement more long-term investment strategies (Acharya, Myers, and Rajan, Journal of Finance 2011). Relatedly, the presence of employees at the board can ensure that information flows smoothly between different levels of the hierarchy (either from top to middle management, or from middle management to top). Better information sharing should then lead to more informed board decisions and to a better implementation of these decisions. At the opposite, the presence of employees at the board can help top managers develop antitakeover strategies, at the expense of external shareholders. Or, the presence of directors with different objectives and horizons can burden the decision process and result in suboptimal choices. Which effects prevail, and which firms are more likely to be exposed to these effects is then an empirical issue.

Measuring empirically whether and how employees' participation at the board affects firms' decisions is a difficult task, to the extent that the nomination of employees as directors is an endogenous decision. Also, most existing research focuses on large firms (Ginglinger,

Meggison, and Waxin, Journal of Corporate Finance 2011). The objective of this research is double:

- First, it is to identify theoretically the channels through which employees' participation at the board can affect firm value and strategy choices.
- Second, it is to exploit a recent evolution of the French legislation regarding mandatory employees' board representation in order to assess whether the presence of employees at the board changes firms' decision and market value. To do so, we will rely on the adoption of the 14 June 2013 Law (resp. the 17 August 2015 Law) that impose mandatory seats for firms employing more than 5000 (resp. 1000) employees in France. To identify a causal effect, we plan to implement a diff-in-diff strategy, by matching firms affected by the new law with similar firms whose number of employees is just below the threshold defined by the law.

**Project 2: Employee involvement in corporate decisions (coordinated by Patricia Crifo, Ecole Polytechnique and Antoine Rebérioux, University Paris 7)**

In the spirit of recent debates in France to redefine the role and missions of companies, the literature on worker involvement in corporate strategy and decision overcomes the restrictive approach of an employment relationship based only under the framework of subordination. Beyond this generic definition, the notion of employee involvement or participation covers a large number of practices and devices that are very different. In particular, worker involvement may be implemented at the operational and/or at the strategic level. The objective of this research project is to propose a novel analysis of worker involvement by developing four main analyses. First, we propose to describe the various types of employee participation in corporate decisions (participation and work organization, participation and bargaining, financial participation and board-level participation). Second, we will examine employee participation in strategic decision via the company's governance structure. In particular, we will analyze the legal, economic and sociological determinants of such type of worker involvement and the diversity of national models of involvement. Third, we will examine the codetermination model, which is the most advanced type of worker involvement. We will investigate its functioning (designation and role of employee-directors, distinction between one-tier and two-tier board structure) and its expected impact on firm performance. In the fourth and last part of the project, we will examine the complementarity between the various forms of involvement to answer the following questions: what are the relationships between employee-directors and

employee-shareholders? how do companies articulate boards with employee-directors and worker involvement at the operational and bargaining level?

**Project 3: Carbon pricing under deep uncertainty (coordinated by Christian Gollier, TSE)**

Green investments generates social costs and social benefits that need to be compared in order to determine whether they are socially responsible. The problem is that most environmental benefits, such as reducing climate damages in the case of renewable energy, are not only distant in the future (35% of the CO<sub>2</sub> emitted today will still be in the atmosphere by 2300), but they are also very uncertain in their intensity. How should we take account of this uncertainty when weighting these uncertain future environmental benefits with the current tangible cost of these investments? FDIR already financed my research on these questions in the past, and this agenda generated a set of publications that mostly focus on contexts where risk are Gaussian. This normality assumption allowed me to recommend using a normative version of the standard models from finance theory, adapted to the specificities of climate risks. In particular, I worked on the estimation of the CAPM "climate beta" to help experts pricing carbon with the right risk-adjusted "climate discount rate".

The problem of this approach based on normal distributions is that the risk profile of climate change is summarized by one single number, the climate beta. It is intuitive that this number, which is related to the correlation between long-term climate damages and long-term economic growth, expresses only one aspect of the full story. In reality, I believe that the risk of climate change cannot be summarized by that simple correlation, and that one should also focus at one happens in the extreme events, such as those that materialize when temperature increases by more than 5 degrees Celsius. We have learned from the recent financial crisis that correlations can shift quite radically in catastrophes, and the anticipation of what happens in these events is a key element of optimal risk management. I would like to explore the question of whether these ingredients would modify the way we estimate the social cost of carbon that should be used in our evaluation of the social responsibility of green investments. Valuing green investment is of course a crucial issue for policy makers. It is also of utmost importance for long term investment managers, who need tools to assess the value of these projects in order to define and implement an appropriate strategic asset allocation.

**Project 4: Impact assessment and SRI: Why and how investors use impact indicators?  
(coordinated by Patricia Crifo, Ecole Polytechnique)**

In this project we will use survey data to provide insights into why and how investors use impact assessment methodologies for their socially responsible products. Based on a sample of 120 questionnaires gathered in 2018 in France, we identify the main motivations for impact assessment, and the various assessment styles it takes in practice. A first preliminary and descriptive analysis of the data shows that simplicity and relevance of the impact assessment measure is the most frequent motivation, followed by comparability (capacity to be standardized). Among the various impact assessment styles, pure ESG indicators and engagement measures are the most widespread tools. An important impediment to the use of impact assessment is the lack of comparable standards and data availability.

We propose a more in-depth study of these data, using empirical (econometric) methods to identify the drivers and obstacles to impact assessment, its relevance to investment performance, in relationship with the actual or required indicators to be developed.

**References**

Acharya, V., S. Myers, and R. Rajan, The Internal Governance of Firms, *Journal of Finance* 2011

Ginglinger, E., W. Megginson, and T. Waxin, Employee Ownership, Board Representation, and Corporate Financial Policies, *Journal of Corporate Finance* 2011