

Report for year 2007







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Agenda for the meeting of the Orientation Committee

January 30th 2008 11:00 13:00

- 1. Main achievements of the first year
- 2. Perspectives (budget and research in progress)
- 3. Discussion and decisions by the Committee (conference etc.)
- 4. Miscellaneous

Executive summary

Research team

Christian Gollier, IDEI & Toulouse School of Economics (Chair coordinator)

Jean-Pierre Ponssard, Ecole Polytechnique (Chair coordinator)

Bruno Biais, IDEI & Toulouse School of Economics

Catherine Casamatta, IDEI & & Toulouse School of Economics

Patricia Crifo, Ecole Polytechnique & UHA (coordinator of work group 2)

Pierre Fleckinger, Ecole Polytechnique & Columbia University

Eric Giraud-Heraud, INRA Paris & Ecole Polytechnique

Jean-Francois Laslier, Ecole Polytechnique

Thomas Mariotti, IDEI & & Toulouse School of Economics

Nicola Mottis, ESSEC

Dominique Plihon, University Paris XI

Sylvaine Poret, INRA Paris & Ecole Polytechnique

Sébastien Pouget, IDEI & Toulouse School of Economics (coordinator of work group 1)

Shyama Ramani, INRA Paris & Ecole Polytechnique

Jean-Charles Rochet, IDEI & & Toulouse School of Economics

Hind Sami, IESEG School of Management

Jean Tirole, IDEI & Toulouse School of Economics

Nicolas Treich, IDEI & & Toulouse School of Economics

Philippe Zarlowski, ESSEC

PhD students

Diane Arjaliès de la Lande, ESSEC

Philippe Krüger, IDEI & Toulouse School of Economics

Thuriane Mahé, UPMF Grenoble

François Perrot, Ecole Polytechnique

Work Group 1

Financial markets, investment strategies and socially responsible finance Marchés financiers, stratégies d'investissement et finance responsable

1. Research objectives

The objective of this work group is to study the interaction between financial markets and corporate social responsibility. Firms' socially responsible strategies are characterized by two basic characteristics: i) these strategies are bound to control the externalities created by firms on their environment, and ii) these strategies are often viewed as having long-term effects. Do financial markets value these externalities? How to discount the far future? Do Financial markets imperfections impede the valorisation of corporate social responsibility? Are long-term information incorporated in asset prices? This work group will analyse these issues using theoretical, experimental and empirical methodologies.

2. Executive summary

<u>From Pigou to Extended Liability: On the Optimal Taxation of Externalities under Imperfect Financial Markets</u>

by Jean Tirole, Toulouse School of Economics and IDEI

An important contribution of economics to public policy rests on the precept that price signals should force producers of externalities to internalize the welfare of other economic agents. Pigou (1920)'s celebrated insight on the taxation of externalities provided an intellectual foundation for a variety of policies from pollution taxes/permits to experience rating. Pigovian taxation's policy appeal is limited if the polluter has insufficient resources to pay the damage when it occurs. To defend Pigovian taxation in the presence of judgment-proof agents, its proponents point at the many institutions extending liability to third parties. Yet little is known about the validity of Pigou's analysis in this context.

The paper analyzes the costs and benefits of extended liability and investigates whether full internalization is called for in the presence of agency costs between potential polluters and providers of guarantees. Its contribution is two-fold. It first shows that the better the firms' corporate governance and the stronger their balance sheet, the more closely taxes should track the corresponding externality. It then develops the first analysis of extended liability when guarantors themselves may be judgment-proof and the extension of liability may give rise to further externalities. Relatedly, it derives the curvature of the optimal taxation of externalities in a multiplant firm.

Sustainable economic valuation

by Christian Gollier, Toulouse School of Economics and IDEI

Many human activities create negative externalities that are not valued and internalized. This implies that individual decisions are not socially efficient. Altruistic agents and social planners should influence individual decisions if they can by inducing firms to value these externalities when they select their investment strategy. Whereas it is easy to identify these externalities, it is often hard to quantify them adequately. The risk is too overshoot, or to

eliminate one risk by creating another bigger one. For example, how should a perfectly altruistic agent evaluate genetically modified organisms, which could save humanity by providing food to everybody, but which could also destroy our environment in an irreversible way? The same question arises for the nuclear industry, or industries to emit greenhouse gases.

The aim of this long-term research agenda is to provide tools for the socially responsible investment industry and for governmental agencies to value externalities in order to help them to determine what is a socially responsible investment strategy.

In the recent past, I have developed an important research project on the choice of the discount rate. The discount rate is the key element to value actions that have long lasting consequences for the environment. This point is illustrated by the key role of the discount rate that was used in the Stern Review to value the damages generated by the emission of carbon dioxide. Through my publications and participations to scientific forums, I actively contributed to the international debate on this question. Independently to my Harvard colleague Marty Weitzman, I demonstrated the key role of our expectations about the wealth growth process in the determination of the socially efficient discount rate. I developed arguments to use 4% to discount damages occurring within 50 years, and then smoothly reducing this rate to 2% for damages occurring in more than one or two centuries. I plan to extend these works to disentangle the discount rate used to value future monetary damages from the one used to value environmental damages.

Another complex question associated to the valuation of environmental externalities is generated by the highly hypothetical distribution of damages that characterizes the uncertain world in which we live. This is particularly true for the GMO industry, but is also still true for the valuation of greenhouse gases or the nuclear industry. It is now traditional to refer to the precautionary principle as a guiding rule to value investments in these industries. But nobody know exactly how to interpret this principle, and how to operationalize it in practical decision processes, in particular when people disagree on the true probability distribution of damages. Following my previous work with Nicolas Treich, I plan to contribute by my research to the emergence of operational decision rules of the precautionary principle.

The demand for socially responsible investments: ex ante determinants and ex post consequences

by Patricia Crifo, Polytechnique, and Hind Sami, IESEG

This research project aims at analyzing the demand for socially responsible investments (SRI) by examining both its ex ante determinants and ex post persistence.

This work relies first on a literature review on the demand for SRI both from a theoretical and empirical perspective. This approach will contribute to the debate on the determinants of socially responsible investments by focusing on the complementarity between ex ante determinants and ex post performance.

The problem of explaining the determinants of SRI demand indeed raises many questions:

- what is the right objective function for SR investors?
- are there informational variables that are crucial for the SRI decision?
- what are the extra-financial criterion relevant for this decision?
- do SR investors have particular attitudes or biases towards risk, loss aversion?
- what is the correct notion of rationality?
- are SR investors self interested or do they care about a larger community?

Several authors have addressed some of these issues but no single theory have been proposed yet to explain the observed determinants and the ex post level and characteristics of the demand for SRI. Our paper proposes a general model of investor preferences with two categories of determinants: financial and extra-financial variables, and we review the existing literature on SRI demand both from a theoretical and empirical perspective.

In a second step, our objective is to provide an evaluation of the demand for SRI on a sample of French investors by decomposing empirically the ex ante determinants and the ex post level of SRI and its persistence.

The joint dynamics of Corporate Social and Financial Performance

by Philip Krüger, Toulouse School of Economics and IDEI

On the basis of a panel data set containing multiple measures of corporate social responsibility, this project tries to model the joint dynamics of corporate social responsibility and financial performance for the S&P 500 companies from 1991 to 2006. The accounting dimension of financial performance is studied by analysing key financial figures such as the capital structure, the dividend policy as well as the general profitability of the companies contained in the dataset. Furthermore the profitability of multiple investment strategies is analysed conditional on the social responsibility of the companies.

What is the Value of Corporate Social Responsibility?

by Nicolas Treich, Toulouse School of Economics and IDEI

The European Commission defines Corporate Social Responsibility (CSR) as a "concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment". But "how much" do socially responsible companies contribute to the society? In other words, what is the value of CSR?

It is recognized that CSR may have an important role to play when companies' activities induce large externalities (such as pollution). Yet, centralised regulation is the traditional response to externalities. Nevertheless, there are limits to what can be achieved by centralised regulation. The value added of CSR thus ultimately depends on the relative ability of CSR, versus traditional centralised regulation, to reduce externalities.

The estimation of the social value of reducing externalities is a difficult task. What is for instance the social value of reducing greenhouse gases emissions, compared to the one of reducing the incidence of cancers in the society? Interestingly, there exists a robust and transparent approach in economics based on benefit-cost analysis, which permits to transform any types of social benefits into monetary units. Typically, benefit-cost analysis leads to set reference values for environmental quality, pollution costs, the value of a life saved, etc. Hence, benefit-cost analysis can help quantify the extra social contribution of companies in terms of externalities' reduction. This evaluation may in turn help the development of a more comprehensible information market for CSR.

Financial Market Short-termism and SRI

by Catherine Casamatta and Sébastien Pouget, Toulouse School of Economics and IDEI

Socially Responsible Investments (SRI) professionals suggest that there is a discrepancy in the time horizon between SR firms and investors in financial markets (CFA Institute report, 2006). SR firms invest in projects with long-term cash flows implications while investors can

have shorter horizons. In particular, agency relationships between funds managers and their clients (individual or institutional investors) call for performance assessments in the short run. Also, clients can have liquidity needs that force them to sell their stakes in the funds.

Our objective is to study whether, in this context, financial markets incorporate the socially responsible aspects of a firm's strategy. More precisely, we plan to analyze the determinants of SRI managers' strategies and the impact of these strategies on the informational efficiency of prices. The expected contribution of this project is to offer a quantitative appraisal of financial markets short-termism and of the link between price efficiency and the strategies used by SRI managers.

Publications and working papers

Gollier, C., et A. Leclair, (2006), Pourquoi l'ISR a-t-il besoin de recherche universitaire? Regards croisés, *Revue d'Economie Financière*, n°85, septembre 2006, 11-18.

Gollier, C., (2007), The consumption-based determinants of the term structure of discount rates, *Mathematics and Financial Economics*, 1 (2), 81-102.

Gollier, C., (2007), La finance durable du rapport Stern, *Revue d'Economie Politique*, 117 (4), 463-473.

Gollier, C., (2007), Whom should we believe? Aggregation of heterogeneous beliefs, *Journal of Risk and Uncertainty*, 35, 107-127.

Gollier, C., (2007), Comment intégrer le risque dans le calcul économique ?, Revue d'Economie Politique, 117 (2), 209-223.

Gollier, C., et J.-L. Nakamura, (2007), Investisseurs socialement responsables: Quelle rationalité pour quelles perspectives?, *Les Cahiers Français*, Avril 2007, n°337, 90-97.

Krüger P., (2008), Corporate Social Responsibility Ratings: Noise or Information?, *Working Paper*, Toulouse School of Economics.

Tirole J., (2008), From Pigou to Extended Liability: On the Optimal Taxation of Externalities under Imperfect Financial Markets, *Working Paper*, Toulouse School of Economics.

Workshops with the sponsors

March 12th 2007 at AFG

General presentation of the research projects

November 9th 2007 at AFG

10h00 – 10h30 : Nicolas Treich : «Le rapport TSE-LERNA sur la responsabilisation des entreprises » préparé pour le « Grenelle Environnement»

10h30 – 11h00 : Sébastien Pouget (with Catherine Casamatta): «Court-termisme des marchés financiers et ISR»

11h00 – 11h30 : Patricia Crifo (with H. Sami): «Caractéristiques de la demande pour l'ISR» 11h30 – 12h00: Christian Gollier : «Construire les outils d'évaluation du développement durable»

Work Group 2

Firms' strategies, relationship with stakeholders and sustainable finance Stratégie des entreprises, relations avec les parties prenantes et finance durable

1. Research objectives

This work group aims at developing a conceptual framework that combines the following three dimensions:

- the general impact of sustainable investment in firms' strategies, the diffusion of such ideas among shareholders, their impact on investor relations.
- the determinants of firms' CSR strategies, its multiple facets and heterogeneity across and within sectors and its relationships with firms' effective or perceived performance,
- the implementation of firms' CSR strategies from the Board, to the top and middle managers, and all through the organization, and in that respect the role of performance indicators and incentives to exert both financial and social efforts through insurance, financial, and compensation contracts.

2. Executive summary

The research projects of this work group focus on two main dimensions of the determinants and the performance of firms' CSR strategies: their empirical and sectoral characteristics on the one hand and their incentives and contractual determinants on the other hand. These two approaches are complementary and each research project benefits from the stimulating environment provided by the work group.

• The sectoral dimensions of firms' CSR strategies: analysis of the banking, utilities, construction and agro-food sectors.

Mottis, Ponssard, Plihon and Zarlowski investigate the sources of differences in corporate social responsibility (CSR) in firms belonging to the same sector of activity. The following steps will be undertaken:

- Review of the academic literature, in particular to formalize the conceptual link between Corporate Social Responsibility and Financial Performance
- Data analysis of the CSR performance of firms within each sector as seen from the main rating agencies (Vigeo, Innovest, Asset 4, Eiris...) and interviews of the leading financial analysts in each sector
- Interviews of managers in charge of CSR in companies to focus the study on the main sources of differentiation within a given sector and then further analysis within each organization of how the CSR strategy is implemented.

Arjaliès de la Lande and Perrot have joined the project as doctoral students. Arjaliès de la Lande will focus her research on two specific sectors: multi-utilities and banking. Perrot's research focuses on firms' Base of the Pyramid (BoP) strategies (profitability and impact) with a special emphasis on the construction sector.

Giraud-Héraud, Poret, Hoffman, Hammoudi and Grazia analyze the economic role of standards with special attention to the agro-food sector. Standards indeed affect market risks, consumers' demand, regulations and investors and therefore represent a form of insurance for

firms and investors. The objective of this research project is to examine the economic efficiency of standards developed by companies in response to consumer concerns pertaining to food quality and food safety and as a complement to and/or in response to existing and anticipated public policy. They develop a theoretical framework in which alternative vertical relationships between companies (between processing firms and their suppliers or between processing firms and retailers) play a crucial role. Food safety (improving the internal production process and coordinate the interaction within the chain), the taste and nutritional quality of products (reducing inputs with negative health effects) and the ethic behavior of firms from a social perspective (fair trade, improved working conditions, etc) are aspects that will be highlighted in examining the economic efficiency of standards.

Poret and Mahé study the determinants and characteristics of fair trade. Poret and Chambolle propose a theoretical contribution to the debate surrounding the introduction of Fair Trade products into large-scale retail distribution. In this model, a Fair Trade certifier and a traditional producer compete to supply their product to a single retailer, consumers who are Fair Trade likers are willing to pay an "ethical" premium for the Fair Trade product, and the premium depends on the revenue of Fair Trade product producers. They show that in equilibrium, a retailer's decision to sell the Fair Trade product is not based on the percentage of consumers who are willing to pay for it, but on how much the Fair Trade "likers" are willing to pay.

The work of *Ramani* focuses on the interplay between innovation and CSR. It is widely acknowledged that firms have a social responsibility to ensure that they contribute to long term sustainable development as the principal agents of innovation creation and diffusion in an economy. However, firms will pursue R&D and innovation strategies that are socially responsible, only if such actions have an impact on the firm's market and financial performance. The objective of the research project is to explore the motivations for a firm to exhibit social responsibility through four case studies: Monsanto (Agbiotech, USA), Aventis (Pharma, France), Cipla (Pharma, India) and STMicroelectronics (Minatech Nanotechnology Park, France). Ramani shows that when it comes to innovation strategies, social responsibility may or may not influence the appropriation of innovation rents, depending on the extent of the potential externalities generated by the innovation. Social Responsible innovation investment might be voluntary, involuntary or occur by chance. A firm must distinguish between several layers of stake holders and it is the stake holders who are least connected to the firm who must be most brought into public dialogue in order to ensure successful commercialization of the innovation.

• The managerial and contractual devices associated to CSR strategies

Biais, Casamatta and Mariotti study whether corporate social responsibility facilitates or hinders access to funds and investment. They consider a principal agent model, where the manager is the agent and the investors are the principal. This is a multi-task moral hazard situation where, to enhance performance, the manager can exert costly but unobservable effort in two dimensions: social responsibility and operating profits. Social responsibility can make it harder to increase operating profits, as it precludes unethical ways of making money. To give managers incentives to raise corporate social responsibility it is necessary to link their compensation to measures of societal performance. Depending on parameter values, incentivizing managers to improve corporate responsibility can facilitate or hinder access to funds. When social responsibility is not too costly, it can raise access to funds and be an optimal strategy in our moral hazard context, even if it were not in a first best situation. When

social responsibility is costly, it can still be optimal, but in that case it is efficient to split tasks and entrust one manager with the maximization of operating profits and another manager with corporate social responsibility.

In *Biais, Mariotti, Rochet* and Villeneuve, a firm is subject to accident risk, which the manager can mitigate by exerting effort. An agency problem arises because effort is unobservable and the manager has limited liability. The occurrence of accidents is modelled as a Poisson process, whose intensity is controlled by the manager. We use martingale techniques to formulate the manager's incentive compatibility constraints. The optimal contract is characterized by a differential equation with delay. The manager receives cash transfers only if no accident occurs during a sufficiently long period of time, while the firm is downsized if accidents are too frequent. This can be implemented by cash reserves, along with insurance, financial, and compensation contracts. The insurance contract involves a deductible and a bonus penalty system. The financial contract consists of bonds that pay constant coupons until the firm enters financial distress. Covenants request that the firm be downsized when its liquidity ratio falls below a threshold. The manager's compensation policy promises incentive wages when the accumulated performance of the firm is high enough. Our theoretical analysis also delivers new empirical implications about the dynamics of insurance premia and credit yield spreads.

Crifo and Sami examine what motivation tools firms have to design to implement their sustainable development policies. A crucial dimension of firms' CSR strategies indeed lies in the participation of employees at all hierarchical levels. From this perspective, middle managers have a key role to play: they have both to supervise their subordinates' tasks and to report and respond to board's demands. The objective of this project is to examine whether the implementation of CSR policies aggravates or alleviates the complex tasks delegated to middle managers. They propose a model that formalizes the motivation of middle managers in an agency relationship where middle management is subject to a double moral hazard problem. In a first stage they specify the impact of CSR objectives on managers' intrinsic (contingent rewards) and extrinsic motivation (e.g. job enrichment or interest to do the task) and in a second stage they analyze the compensation contract that solves the moral hazard issue ex ante (congruence between the objectives of the board and middle managers on CSR goals) and ex post (internal reporting on CSR indicators). When there is a trade-off between quality and quantity in the firm's CSR policy, such a framework is likely to generate a threshold effect whereby the quality of reporting will be higher, the higher the extent of firm's sustainable development strategy.

Fleckinger and Glachant analyze the impact on welfare of unilateral commitments of firms to better environmental or social behavior. They develop a policy game involving a firm and a regulator. They show that the regulator should not promote the diffusion of CSR in areas where Voluntary Agreements can be used and that public voluntary programs may be better suited in contexts where CSR is pervasive.

Laslier examines the links between responsibility and effort and more generally the so-called "responsibility cut." Being responsible means being able to respond and, following the tradition in Economics, we restrict attention to people responses to a variation in well-being. In our societies, the question of well-being is essentially the question of poverty, considered as an abnormal and frightening situation. In turn, when is one "responsible" of such losses? People should be compensated for what they cannot be held responsible for but responsibility of what? Different streams of research have scrutinized the empirical answers people provide

to the philosophical question of the responsibility cut. This empirical research makes use of four different methodologies: social surveys, questionnaires, laboratory experiments and fields experiments. All lead to essentially the same conclusion: the cut is on effort.

Publications and working papers

- B. Biais, T. Mariotti, JC. Rochet, et S. Villeneuve. (2007). "Accident risk, limited liability and dynamic moral hazard", *Working Paper*, Toulouse School of Economics.
- P. Crifo and H. Sami (2008). Entrepreneurship, technological change and endogenous returns to ability. *Economic Modelling*. forthcoming.

Giraud-Héraud E., Combris P., Seabra Pinto A., Fragata A., (2007a) "Does Taste beat Food Safety? Evidence from the "Pera Rocha" case in Portugal", in Canavari M., Regazzi D., Spadoni R. (eds., 2007). *International Marketing and International Trade of Quality Food Products*. Proceedings CD-ROM of the 105th Seminar of the European Association of Agricultural Economists, Bologna, March 8-10, 2007.

Giraud-Héraud E., Grazia C., Hammoudi H., (2007b) "Agrifood safety standards, market power and consumer misperceptions", in Canavari M., Regazzi D., Spadoni R. (eds., 2007). *International Marketing and International Trade of Quality Food Products*. Proceedings CD-ROM of the 105th Seminar of the European Association of Agricultural Economists, Bologna, March 8-10, 2007.

Giraud-Héraud E., Grazia C., Hammoudi H., (2007c) "Strategies for the development of brands in the agrifood chains", *Working Paper*.

Giraud-Héraud , E., Hammoudi H., Hoffmann , R., Soler LG. (2007d) "Vertical Relationships and Joint Private Safety Standards", *Working Paper*.

- D. Plihon, JP Ponssard and Ph. Zarlowski (2005) Towards a convergence of the shareholder and stakeholder models. *Corporate Ownership and Control*, Vol 2, Issue 3, 11-18.
- JP. Ponssard. (2007). "Quel impact de la montée en puissance des acteurs financiers sur les entreprises françaises?". Working Paper.
- S. Poret and C. Chambolle. (2007). "Fair Trade Labeling: Inside or Outside Supermarkets?". *Journal of Agricultural & Food Industrial Organization*. Vol. 5 Issue 1, Article 9. Available at: http://www.bepress.com/jafio/vol5/iss1/art9
- S. Poret. (2007). "Les défis du commerce équitable dans l'hémisphère Nord". CECO Discussion Paper 2007-15. Forthcoming in « Etat de l'art » d'*Economie Rurale*.
- Ph. Zarlowski, Marketing Corporate Social responsibility in a National Context: The case of Social Rating Agencies in France. In: *Managing Corporate Social Responsibility in Action*. Aldershot (England): Ashgate Publishing Limited, 2007, p. 167-186

Presentations

- B. Biais, T. Mariotti, JC. Rochet and S. Villeneuve. (2007). "Accident risk, limited liability and dynamic moral hazard". Presented at Princeton University (Séminaire d'économie théorique); New York University; Yale University; Oxford Finance Symposium.
- P. Fleckinger and M. Glachant. (2008). "On preemptive corporate social responsibility". Presented at Seminaire Environnement de l'Université de Toulouse.
- Giraud-Héraud E., Hammoudi A., Hoffmann R., Soler L.G., (2007c) "Vertical Relationships and Joint Private Safety Standards", Presented at the 2nd International Symposium on Economic theory, policy and applications, Athens, 6-7 August 2007.
- JP. Ponssard. (2007). "Quel impact de la montée en puissance des acteurs financiers sur les entreprises françaises?". Presented at Groupe de travail de l'Anvie
- S. Poret and C. Chambolle. (2007). "Fair Trade Labeling: Inside or Outside Supermarkets? Presented at: European Association for Research in Industrial Economics 2007, Association of Southern European Economic Theorists 2006, Canadian Economics Association 2006, Seminars ALISS, AFIO (Toulouse), UQAM (Montreal).

Work in progress

- DL. Arjalies de la Lande. (2007). "Les modalités d'émergence de l'Investissement Socialement Responsable: Proposition de typologie autour des référentiels sociétal et économique". Work in progress.
- P. Crifo and H. Sami. (2008a). "CSR, organization and incentives: how can firms motivate middle managers?". Work in progress.
- P. Crifo and H. Sami. (2008b). "Entrepreneurship and endogenous social norms". Work in progress.
- P. Fleckinger and M. Glachant. (2008). "On preemptive corporate social responsibility". Work in progress.
- S. Ramani, D. Kale, and V. Mukherjee (2007). "Innovation Strategies and Corporate Social Responsibility: A Tale of Four firms". *Work in progress*.

Workshops with the sponsors

March 28th 2007 at AFG

General presentation of the research projects

December 6th 2007 at AFG

10h00 - 10h30: P. Crifo (with H. Sami): "RSE et middle management: un nouvel outil de motivation?"

10h30 – 11h00 : JP Ponssard (with N. Mottis, D. Plihon et P. Zarlowski) : "L'implication des entreprises en matière de RSE : déterminants, formes et relation avec la performance financière"

11h00 – 11h30 : C. Casamatta (with B. Biais et T. Mariotti) : "RSE, capacité d'investissement et relation d'agence multi-tâches"

11h30 – 12h00: R. Hoffman (with E. Giraud-Heraud, S. Poret et C. Grazia): "Efficiency of corporate social responsibility"

Perspectives

Organization of an open workshop in Fall 2008

Theme: Corporate social responsibility: from niches to mainstream

Invitations (tentative): Stuart Hart (Cornell University), Jeremy Moon (University of Nottingham), David Vogel (University of California, Berkeley)...

Chaire Finance Durable et Investissement Responsable

Working papers and Publications

Selection of abstracts

Comment intégrer le risque dans le calcul économique?

Christian Gollier*

Dans cet article, j'explique pourquoi il est raisonnable d'actualiser des coûts et bénéfices futurs sans risque à 4 % à court terme et à 2 % à long terme. La prise en compte du risque du projet d'investissement doit se faire par l'imputation de primes de risque aux cash-flows futurs plutôt que par une hausse arbitraire du taux d'actualisation. Il faut aussi tenir compte des valeurs d'option de report de l'investissement. Ceci suggère que la baisse du taux d'actualisation récemment proposée par le Commissariat au Plan ne devrait pas augmenter massivement le nombre de projets d'investissement public dont la VAN est positive, si la prise en compte du risque est convenablement intégrée au calcul économique.

analyse coût-bénéfice - actualisation - prime de risque - investissement public

How to integrate the risk into the economic calculation?

In this paper, I explain why it is sensible to discount future risk free costs and benefits at a rate of 4 % in the short run and of 2% in the long run. The riskiness of future cash flows must be taken into account by imputing risk premia rather than by an arbitrary increase in the discount rate. Option values must also be integrated in the analysis. This suggests that the recent reduction of the discount rate proposed by the Commissariat au Plan should not massively increase the number of public investment projects with a positive NPV if risk is correctly integrated in the cost-benefit analysis.

cost-benefit analysis - discounting - risk premium - public investment

Classification JEL: H43, D92

Ce texte cherche avant tout à proposer une approche simple à la prise en compte du risque dans l'évaluation des investissements collectifs. Il ne fait que synthétiser un vieux débat sur ce sujet sous une forme que j'ai voulu la plus pédagogique possible, en évitant tout développement théorique inutile.

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The consumption-based determinants of the term structure of discount rates

Christian Gollier

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Abstract The rate of return of a zero-coupon bond with maturity T is determined by our expectations about the mean (+), variance (-) and skewness (+) of the growth of aggregate consumption between 0 and T. The shape of the yield curve is thus determined by how these moments vary with T. We first examine growth processes in which a higher past economic growth yields a first-degree dominant shift in the distribution of the future economic growth, as assumed for example by Vasicek (J. Financ. Econ. 5, 177-188, 1977). We show that when the growth process exhibits such a positive serial dependence, then the yield curve is decreasing if the representative agent is prudent (u''' > 0), because of the increased risk that it yields for the distant future. A similar definition is proposed for the concept of seconddegree stochastic dependence, as observed for example in the Cox-Ingersoll-Ross model, with the opposite comparative static property holding under temperance (u'''' < 0), because the change in downside risk (or skweness) that it generates. Finally, using these theoretical results, we propose two arguments in favor of using a smaller rate to discount cash-flows with very large maturities, as those associated to global warming or nuclear waste management.

Keywords Stochastic dependence · Yield curve · Far distant future · Prudence · Temperance - Downside risk

JEL Classification G12 · E43 · Q51

An earlier version of this paper was entitled "Transitory shocks to GNP and the consumption-based term structure of interest rates". I am indebted to John Campbell, Martin Weitzman and to two referees for helpful comments.



C. Gollier (∑)

La Finance Durable du Rapport Stern

Christian Gollier*

Le rapport Stern introduit de très intéressants outils de la théorie de la finance dans l'évaluation des investissements environnementaux. A partir de cette méthode, Stern évalue l'effet du changement climatique sur le bien-être à une chute équivalente immédiate et permanente du PIB comprise entre 5 et 20 %. Néanmoins, la prise en compte plus réaliste de l'attitude des ménages face au risque et au temps suggère qu'il est plus vraisemblable d'évaluer cette chute autour de 6 %. Mais, pour être congruent avec la temporalité des dommages autant que pour réduire le poids du niveau du taux d'actualisation dans la mesure, il me semble plus logique de présenter ce résultat sous la forme d'une réduction permanente du taux de croissance du PIB de 0,1 % par an.

effet de serre - prime de risque - actualisation - développement durable

Sustainable Finance in the Stern Review

The Stern Review introduces very interesting tools from the theory of finance into the valuation of environmental investments. Stern measures the uncertain impact of climate change on intergenerational welfare as equivalent to an immediate and permanent drop in between 5% and 20% of aggregate consumption. However, a more realistic calibration of the households' attitude towards risk and time suggests that this valuation lies in the neighbourhood of the lower bound of this interval. Notice that this impact can equivalently be expressed as an immediate and permanent drop by 0.1% of the growth rate of aggregate consumption.

climate change - risk premium - discounting - sustainable development

Classification JEL: Q51, D81

Malgré les rapports successifs du GIEC, reconnaissons qu'en France, le débat public relatif aux politiques à mener pour lutter contre l'effet de serre est resté très longtemps dans le domaine de l'imprécation et de l'idéologie. Le rapport Stern constitue un tour de force dans le sens où il a placé la science économique au centre de l'analyse. Malgré un bon démarrage au milieu des années 90, les rapports successifs du GIEC se sont enfoncés dans leur refus d'une utilisation intelligente des outils classiques de l'évaluation économique, pour favoriser les analyses multicritères assez floues et le refus de la quantification probabilisée. Le génie du rapport Stern provient au contraire de la magie du chiffre, dans laquelle il est dit que, pour éliminer les

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Whom should we believe? Aggregation of heterogeneous beliefs

Christian Gollier

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Abstract We examine the collective risk attitude of a group with heterogeneous beliefs. We prove that the wealth-dependent probability distribution used by the representative agent is biased in favor of the beliefs of the more risk tolerant consumers. Moreover, increasing disagreement on the state probability raises the state probability of the representative agent. It implies that when most disagreements are concentrated in the tails of the distribution, the perceived collective risk is magnified. This can help to solve the equity premium puzzle. We show that the trade volume and the equity premium are positively correlated.

Keywords Aggregation of beliefs · State-dependent utility · Efficient risk sharing · Disagreement · Asset pricing · Portfolio choices

JEL Classification D81 D83

People have divergent opinions on a wide range of subjects, from the growth rate of the economy next year, the profitability of a new technology to the risk of global warming. Suppose that this heterogeneity of beliefs does not come from asymmetric information but rather from intrinsic differences in how to

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Avant-propos

Pourquoi l'isr a-t-il besoin de recherche universitaire ?

Regards croisés

CHRISTIAN GOLLIER *
ALAIN LECLAIR **

Qu'est-ce que l'ISR ? D'où vient la notion de finance durable ?

Christian Gollier: Un investissement est dit socialement responsable s'il optimise ses choix en matière d'allocation d'actifs non plus uniquement sur la base de critères financiers, mais en y intégrant aussi des préoccupations sociales, éthiques et environnementales. Ceci étant dit, reste à déterminer le caractère et le poids de ces préoccupations extra-financières dans les objectifs du véhicule d'investissement utilisé, ce qui laisse de larges marges de manœuvre. Quand un investisseur choisit une gestion classique, il ne demande au gestionnaire qu'à optimiser la performance espérée pour un niveau de risque spécifié à l'avance. La feuille de route est moins évidente à décrire lorsque des objectifs sociaux et environnementaux sont intégrés au tableau de bord.

Les marchés exercent aujourd'hui un rôle prépondérant dans les grands choix financiers stratégiques qui détermineront le bien-être des générations présentes et futures. L'Europe Continentale, longtemps réticente au capitalisme, s'interroge sur le bien fondé de cette évolution, reposant éternellement sur une question qui est au centre de la science

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Propos recueillis par Carlos Pardo, Directeur des études économiques de l'AFG.

Acteurs et gouvernance Investisseurs socialement responsables: quelle rationalité pour quelles perspectives?

The state of the s

Développement et environnement Cahiers français n° 337

> Acteurs et gouvernance

> > D/

Face aux défaillances du marché - dont les dégradations environnementales sont une conséquence – l'intervention publique constitue la réponse la plus fréquente, que l'État se substitue au marché ou qu'il rétablisse les conditions de son fonctionnement optimal. L'engagement des citoyens à travers leurs comportements de consommation ou d'épargne, ancien déjà dans le monde anglo-saxon, constitue une forme alternative et complémentaire de régulation, qui connaît aujourd'hui un fort engouement. En témoigne le développement rapide ces dernières années des formes « alternatives » de consommation et d'épargne telles que le commerce équitable, l'agriculture biologique ou l'investissement socialement responsable (ISR). C'est à cette dernière pratique, concernant les épargnants, que s'intéressent

Christian Gollier et Jean-Louis Nakamura. L'ISR désigne une forme de placement de l'épargne qui intègre dans l'évaluation de la performance des actifs des critères éthiques, sociaux et/ou environnementaux aux côtés des critères financiers classiques. Le développement des produits ISR nécessite une meilleure connaissance des motivations et de la

demande qui s'y rapportent, afin d'établir de nouvelles règles d'évaluation des actifs. Les implications sont différentes, selon que la demande répond à des déterminants de l'ordre de la rationalité économique – les produits ISR pouvant être considérés comme moins risqués – ou à des considérations altruistes.

C. F

De la régulation publique des défaillances de marché à l'engagement des acteurs économiques

Le marché et ses défaillances

Dans une économie parfaite, la concurrence conduit à une allocation Pareto-efficace des ressources. Les objectifs conjoints de maximisation du profit des entrepreneurs, d'optimisation de la performance financière des portefeuilles des investisseurs et de satisfaction des plaisirs égoïstes des consommateurs sont supposés conduire, selon le fameux premie théorème de l'économie du bien-être, à une allocation idéale où il ne serait pas possible d'augmenter le bonheur des uns sans réduire celui des autres. Dans ur tel monde, toute forme de volontarisme de investisseurs n'aurait au mieux qu'un effet redistributif et serait au pire destructrice de valeur. Mais le monde n'est pas parfait au sens où l'entendent les économistes et ceux-ci ont montré depuis longtemps que la concurrence ne conduit que rarement à une allocation de premier rang des ressources. Les origines de cer « market failures » sont multiples, mais reposent pou l'essentiel sur l'existence d'asymétries d'information la présence de « mauvaises » ou trop faibles incitations et, surtout, la non-prise en compte par les agenti économiques des externalités, c'est-à-dire des effet de leur activité sur leur environnement, qui ne sont n facturés (cas des externalités négatives, comme pa exemple la pollution) ni au contraire rémunérés (car des externalités positives, à l'instar de la production de connaissances). Pour ne prendre qu'un exemple d'actualité récente, en l'absence de régulation spécifique, il est ainsi parfaitement rationnel pour ur constructeur automobile compétitif sur le segment des véhicules à forte motorisation de ne pas faire de la maîtrise des rejets polluants de ses véhicules un critère important de sa fonction de production. Il en est de même pour l'acheteur potentiel si les signaux prix incluant par exemple des taxes, n'intègren qu'imparfaitement l'ensemble des externalités. Li concurrence sur ce segment va ainsi conduire à un excèt

From Pigou to Extended Liability: On the Optimal Taxation of Externalities under Imperfect Financial Markets.*

Jean Tirole †
January 8, 2008

Abstract

An important contribution of economics to public policy rests on the precept that price signals should force producers of externalities to internalize the welfare of other economic agents. Pigou (1920)'s celebrated insight on the taxation of externalities provided an intellectual foundation for a variety of policies from pollution taxes/permits to experience rating. Pigovian taxation's policy appeal is limited if the polluter has insufficient resources to pay the damage when it occurs. To defend Pigovian taxation in the presence of judgment-proof agents, its proponents point at the many institutions extending liability to third parties. Yet little is known about the validity of Pigou's analysis in this context.

The paper analyzes the costs and benefits of extended liability and investigates whether full internalization is called for in the presence of agency costs between potential polluters and providers of guarantees. Its contribution is two-fold. It first shows that the better the firms' corporate governance and the stronger their balance sheet, the more closely taxes should track the corresponding externality. It then develops the first analysis of extended liability when guarantors themselves may be judgment-proof and the extension of liability may give rise to further externalities. Relatedly, it derives the curvature of the optimal taxation of externalities in a multiplant firm.

Keywords: Pigovian taxation, externalities, financial constraints, extended liability, snowball effects.

JEL numbers: D62, D82, H23, J65, Q58

^{*}This paper builds on joint work with Olivier Blanchard integrating unemployment insurance and employment protection (Blanchard-Tirole 2008). I am very grateful to him for letting me develop ideas that entirely originated in our joint research, and to him, Marcel Boyer, Yolande Hiriart, Thomas Mariotti, Jean-Charles Rochet and participants at a seminar at Université de Montréal for helpful comments. The funding of the chair "Sustainable Finance and Responsible Investment" by the Association Française de Gestion (France-located asset managers and other financial institutions) at IDEI is also gratefully acknowledged. Needless to say, all errors are mine.

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Accident Risk, Limited Liability and Dynamic Moral Hazard*

Bruno Biais[†] Thomas Mariotti[‡] Jean-Charles Rochet[§] Stéphane Villeneuve[¶]

First Draft: February 2007 This Draft: June 2007

Abstract

A firm is subject to accident risk, which the manager can mitigate by exerting effort. An agency problem arises because effort is unobservable and the manager has limited liability. The occurrence of accidents is modelled as a Poisson process, whose intensity is controlled by the manager. We use martingale techniques to formulate the manager's incentive compatibility constraints. The optimal contract is characterized by a differential equation with delay. The manager receives cash transfers only if no accident occurs during a sufficiently long period of time, while the firm is downsized if accidents are too frequent. This can be implemented by cash reserves, along with insurance, financial, and compensation contracts. The insurance contract involves a deductible and a bonuspenalty system. The financial contract consists of bonds that pay constant coupons until the firm enters financial distress. Covenants request that the firm be downsized when its liquidity ratio falls below a threshold. The manager's compensation policy promises incentive wages when the accumulated performance of the firm is high enough. Our theoretical analysis also delivers new empirical implications about the dynamics of insurance premia and credit yield spreads.

^{*}We have benefited from insightful discussions with Ron Anderson, Michael Fishman, Christian Gollier, Roger Myerson, Thomas Philippon, Yuliy Sannikov, Hyun Song Shin, Dimitri Vayanos, Nicolas Vieille, Wei Xiong, with seminar participants at Imperial College London, New York University, Princeton University, Université Paris 1, and with conference participants at the CEPR Corporate Finance and Risk Management Conference, the IDEI-LERNA Conference on Environment and Resource Economics, and the Oxford Finance Summer Symposium. Financial support from the Europlace Institute of Finance and the Fédération Française des Sociétés d'Assurances is gratefully acknowledged.

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РАЗДЕЛ 1 НАУЧНЫЕ ИССЛЕДОВАНИЯ И КОНЦЕПЦИИ

SECTION 1 ACADEMIC INVESTIGATIONS & CONCEPTS



TOWARDS A CONVERGENCE OF THE SHAREHOLDER AND STAKE-HOLDER MODELS

Jean-Pierre Ponssard*, Dominique Plihon**, Philippe Zarlowski***

Abstract

A new hybrid model of corporate governance seems to be emerging as a mixture of the shareholder and the stakeholder models. Its two main characteristics consist in an increased control of corporate executives by strong minority shareholders: this strengthened financial control is balanced by the rise of the social and environmental responsibilities of firms. This paper elaborates on this hypothesis and reviews the forces at work in this emerging process.

Keywords: models of corporate governance, convergence

The evolution of corporate government models has been a controversial question over the last decade. While researchers in law, sociology or economics consider that national models will probably keep their distinctive characteristics (e.g. Roe, 1990, 1994), others conclude that national models are in the process of converging towards the American model of corporate governance (Berger and Dore, 1991, Useem, 1993, 1998, Morin, 1998, Streeck and Höpner, 2003).

In this paper, we argue that national models may converge on an alternative model of corporate

governance, the characteristics of which may be seen as a hybrid of traditional stakeholders and shareholders models.

On one hand, strong minority shareholders have been able to better control the decisions and behaviours of firm executives on key corporate governance dimensions. This closer monitoring of managerial action is more likely to develop in the stakeholder model. However, minority shareholders remain external constituencies to the firm, which also characterises their position in the shareholder model. On the other hand, we hypothesise that firms



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Translating corporate social responsibility in the French business context: a case study of social rating agencies

Philippe Zarlowski

Decembre 2005

Cahier n° DDX-06-01

Résumé:

Selon cet article, la notion de Responsabilité Sociale de l'entreprise – telle qu'elle peut être définie, appréhendée et mesurée par des agences de notation – est influencée le contexte local en matière de gouvernement d'entreprise et doit donc être construite à partir de ce contexte. Cette thèse repose sur une étude de cas menée en France. Les agences de notation s'y sont développées comme des intermédiaires entre d'une part les entreprises et d'autre part les investisseurs et plus généralement l'ensemble des parties prenantes. Les discours, pratiques et modalités de production de ces agences ont été analysés en détail. On démontre que deux conceptions sont à l'oeuvre et que ces conceptions reflètent plus généralement les transformations dans les modes de gouvernement d'entreprise actuellement en cours en France.

Abstract:

In this paper, we argue that Corporate Social Responsibility (CSR) ideas and measures which emerge in a business context— the construction and operationalization of CSR concepts— are influenced by and should be analyzed in conjunction with the local corporate governance environment. We base our proposition on a case study of social rating agencies in France. In this country, social rating agencies have emerged as intermediaries between companies that are expected to supply information on their social responsibility and, on the demand side, investors and further stakeholders. We analyze actors and financiers of leading social rating agencies, their mission statements, production processes and the conceptions that they promote of their economic and social roles. We argue that their activities are rooted on two competing definitions of CSR. We draw a parallel between changes in the field social rating and both traditional features of and transformations in the French corporate governance model.

Mots clés: Gouvernement d'entreprise, Investissement socialement responsable

Key Words: Corporate social responsibility, Social rating, corporate governance

Classification JEL: K00, L00

Agrifood safety standards, market power and consumer misperceptions

Eric Giraud-Héraud 1 , Cristina Grazia 2 , Abdelhakim Hammoudi 3 1 INRA - Ecole Polytechnique, Paris, France; 2 University of Bologna, Italy; 3 INRA and ERMES/Université Paris II, France

This paper analyzes how the public regulation of food safety influences a firm's strategic behaviour in a food chain. In this context, we provide an original theoretical frameword to show how, regardless of the level of standard, food safety regulation may have perverse or unexpected effects. Namely, the level of compliance costs alone cannot explain the producer exclusion due to a high level of standard. We highlight how upstream producer involvement in the market also depends on the strategic interest of the downstream firm to remunerate their compliance process. Finally, we show how the actual level of risk does not necessarily decrease when the standard is reinforced.

KEYWORDS: food safety standards, market power, risk misperception

1 Introduction

Over the last decade, health, safety and environmental regulations have covered a broad range of regulatory techniques from low interventionist to highly prescriptive obligations. The classical rationale for government regulation in the risk and environmental area was the presence of negative externalities and the main feature of regulation is that it directly controls economic agents behaviour and affects an activity before the externality is generated (see for example Viscusi, Harrington and Vernon, 2005).

As illustrated by Henson and Heasman (1998), the compliance with public food safety standards represents a long term decision for firms and implies adaptation costs, which may be relatively high. Hence, the compliance process may pose a considerable burden, especially on small firms (Henson and Caswell, 1999). Namely, when the compliance cost exceeds the benefits, some producers may be excluded from the market of raw materials, with important consequences on the whole economics of the supply chain.

Focusing on the compliance costs and on the benefits in terms of reduced foodborne illness, a large part of the literature examines the food safety regulation issue from a public economics point of view. From the normative standpoint of assessing economic benefits of regulations, the task is to assess society's total willingness to pay for the risk reduction (Viscusi, 2006). The effectiveness of the regulation also represents a critical piece of information required for benefit estimation, but it is rarely known *ex-ante*, when a design (process) standard is concerned (Antle, 2001). This literature often leaves out the market dimension and thus neglects an important element of agrifood markets. However, Caswell and Kleinschmit (1997) present a benefit-cost analysis of the regulation of Alar-residues in heat-processed apple products and show that whether the regulation is appropriate depends both on the extent to which consumers pay premiums for Alar-free products and on a firm's strategy. Even though both consumer WTP for safer products and the distribution of benefits along the supply chain participants are considered, the effects of a firm's strategic behaviour on the risk and on the distribution of benefits are neglected.

However, the level of compliance costs alone cannot explain the effects of food safety regulation in terms of producer exclusion. Indeed, agricultural markets are mainly characterized by a relatively high number of upstream price-taker producers dealing with a highly concentrated processing-retailing sector. Hence, producers who want to achieve relevant market access have a limited choice of buyers and retailers (OCDE, 2007). This gives to processing and/or retailing firms a crucial role in supporting the upstream producer compliance process to food safety standards. The possibility for the downstream firm to select suppliers and improve farmer remuneration, in order to encourage the compliance process with standards, represents a crucial driver for the strategic organization of a supply chain and for the effectiveness of the public regulation. Moreover, analysing the effects of food safety regulation requires to take into account the strategic behaviour of the downstream firms towards upstream suppliers, especially since this latter depends on the anticipation by the firms of consumer behaviour.

Nevertheless, only a few theoretical contributions examine the effects of the standards in such a context of vertical relationships. Hence, the most of the contributions, which take into account the vertical

Strategies for the development of brands in the agrifood chains

Eric Giraud-Héraud¹, Cristina Grazia², Abdelhakim Hammoudi³

Abstract

This paper develops an original framework to better understand the interaction between the development of brands and the quality of raw materials. We consider different levels of consumer trust for a brand and we examine the incentive for firms to improve the quality of a processed product by requiring that upstream suppliers adopt a private standard. In contrast to previous literature, the incentive for firms to develop a more stringent private standard may increase with the level of the regulated minimum quality standard. Moreover, the creation of a private standard can reduce the risk of consumer dissatisfaction while increasing the marketed quantity. Unexpected positive effects of a reinforcement of the minimum quality standard may arise, in the sense that both market access for upstream producers and consumer surplus are improved and final price may decrease with respect to simply complying with the regulation.

1 Introduction

As in any industrial sector, the development of brands by agrifood firms results from the intention to meet consumer demand, while forming the basis of product differentiation from competitors. Moreover, the success of a brand depends both on a specific communication politics towards consumers and on the consumer trust in firm statements about the brand (see for example, the seminal works in the marketing literature since Copeland, 1923).

However, the brand success depends, above all, on the strategic manufacturing decisions, which are made according to the technological possibilities offered to firms. Brand development is thus highly depending on upstream raw material's production conditions, from which the final product results. Therefore, the public regulation, which defines the standards concerning raw material, may be sufficient or, on the contrary, insufficient to facilitate this strategy. Hence, firms might be lead to select only the most effective producers or also to encourage their suppliers to upgrade upstream production conditions, through the creation of a private standard. This input's normalization strategy often corresponds to more or less irreversible investments and procedures (suppliers' selection, contracts' setting, norm's development, product's certification, etc.). It also may influence the firms' short term decisions concerning quantity and price to adapt *in fine* to the evolution of demand and competition environment (see for example, Maurer and Drescher, 1996, Ponssard et al., 2005).

This paper shows how a medium-long term strategic choice about the mode of input procurement influences the short-term strategies, which may be developed by the firm to provide the brand's development. By considering different contexts of consumer trust in the brand, we thus illustrate the reasons why a firm would prefer the reinforcement of the upstream production condition and the conditions such that this strategy is implemented. Moreover, we show that, unlike an accepted idea, this private standard strategy is not necessarily due to a laxity of the authorities in the definition of Minimum Quality Standards (MQS).

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Does taste beat food safety? Evidence from the "Pêra Rocha" case in Portugal

Pierre Combris ¹; Alexandra Seabra Pinto ²; Antonio Fragata ²; Eric Giraud-Héraud ^{1,3}

Until recently, fresh fruits such as pears were provided to markets as generic products. Nowadays, these products are differentiated by cultivars, origins and appearances, as well as by companies' production and processing methods. Therefore, we may now observe a lot of denominations of origin, retailers' and private labels in order to signal the differentiation to the consumers, who are often willing to pay large price premiums for products with specific attributes.

Indeed the value consumers put on fruits depends on the degree of product-information that is available to them and this information derives mainly from tasting and from the label of the products. In this paper, we used an experimental auction to assess how quality attributes information affects consumers' willingness to pay for different types of pears. The BDM auction mechanism was combined with sensory analyses in order to develop an integrated approach to evaluate product's attributes.

The main results show that information on the products' characteristics related to food safety, instantly influences consumers' willingness to pay. However, it appears that sensory intrinsic attributes related to taste finally beat the guarantee of food safety in driving the buying behaviour.

KEYWORDS: Experimental auction, Willingness to pay, Quality signals, Food safety, Fruits.

1. Introduction

The European fruit and vegetable sector has experienced important changes during the last few years. Producers had to meet the challenges, not only of global competition within the European market, but also of the strong concentration process in retailing. Consequently, these products are now differentiated by cultivars, origins and appearances, as well as by companies' production and processing methods. Therefore, we observe a lot of denominations of origin, retailer labels or private brands in order to signal the differentiation to the consumers who are often willing to pay large price premiums for products with specific attributes.

In this paper, we use a protocol based on an experimental auction in order to improve the understanding of how different attributes of fruits can interact and affect consumers' willingness-to-pay (WTP). Taking the example of the pear industry in Portugal, we apply this protocol to both non-certified and certified products. For this last category of products, our aim is to show the role of two kinds of "labels" in order to transmit the information on attributes to consumers: (i) a collective label with a denomination of origin (namely the "Rocha do Oeste" pear) and (ii) a premium retail label (namely the well-known "Fileira Qualidade Carrefour", Carrefour's Quality Lines). The main result we obtained was that "food

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Vertical Relationships and Joint Private Safety Standards

Eric Giraud-Héraud¹, Hakim Hammoudi², Ruben Hoffmann³, Louis-Georges Soler⁴

Abstract

In recent years it has become more common that downstream firms implement joint or collective private standards in order to improve the safety of final products. In this paper, we propose a model of vertical relationships in which a group of downstream firms impose more stringent specifications on upstream suppliers. The probability of failing to provide safe goods is endogenously determined by the investments made by upstream producers. Furthermore, a penalty cost in the event of a crisis, due to a rule of liability, is modeled as a decreasing function of the level of the collective standard. The influence of the rule of liability on the adoption of the joint standard and the size of the stable coalition are examined. The conditions under which the probability of a failure to provide safe goods decrease are examined and discussed.

Keywords:

Private Standards, Safety Standards, Vertical Relationships, Liability

1. Introduction

As a result of the food safety crises in the 1990s public authorities have implemented national and international regulations in an attempt to lower the risks related to eg. microbial pathogens and residues of pesticides. Primarily two types of policy tools have been used. Tightening and/or implementing MQS has been an important public tool, for example in regulating the maximum values of residues in different products, in many countries. Another policy tool has been to establish rules of liability widening the responsibility of food companies for deficiencies in the final products based on a "due diligence" principle. This kind of liability rule was originally stipulated in the Food Safety Act in Great Britain and was later incorporated into the legislation of the EU. In the event of a food crisis firms can protect themselves against legal actions by showing that they have exercised due diligence.

The increased attention on food safety has also resulted in that companies have implemented various voluntary schemes. Although such schemes have been implemented by firms at different levels of the chain it has been most prominent at retail level. Among the options available to firms two main strategies can be distinguished (Codron et al., 2005b).

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Les défis du commerce équitable dans l'hémisphère Nord

Sylvaine Poret¹

September 2007

Cahier n° 2007-15

Résumé:

Le commerce équitable connaît depuis quelques années un intérêt grandissant de la part des industriels et de la grande distribution grâce à sa filière labellisée. Cet article présente le commerce équitable et son évolution, ainsi que le débat sur l'introduction de produits équitables dans la grande distribution. Il fait également le point sur la législation mise en place en France.

Abstract:

The fair trade born fifty years ago defines itself as an alternative approach to conventional trade. In the late 1980s, fair trade organizations began labelling fair products to facilitate their entry into the large-scale distribution. This article presents the concept and its evolution, as well as the debate on the introducion of fair products into the large-scale distribution. It also evaluates the situation of the legislation introduced in France.

Mots clés: Commerce équitable, grande distribution.

Key Words: Fair trade, supermarkets distribution.

Classification JEL: Q01, L31,L38

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Fair Trade Labeling: Inside or Outside Supermarkets?*

Sylvaine Poret and Claire Chambolle

Abstract

This article is a theoretical contribution to the debate surrounding the introduction of Fair Trade products into large-scale retail distribution. In the model, a Fair Trade certifier and a traditional producer compete to supply their product to a single retailer, consumers who are Fair Trade likers are willing to pay an "ethical" premium for the Fair Trade product, and the premium depends on the revenue of Fair Trade product producers. The conditions of existence of an equilibrium where the Fair Trade product coexists with the traditional brand product on the retailer's shelves are highlighted. In particular, we show that a Fair Trade certifier implements this equilibrium if his preferences are such that the weight devoted to the price paid to producers is smaller than the weight he grants to the quantities of Fair Trade product sold. We also show that a retailer's decision to sell the Fair Trade product is not based on the percentage of consumers who are willing to pay for it, but on how much the Fair Trade likers are willing to pay.

KEYWORDS: product differentiation, price discrimination, retailing

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Entrepreneurship turnover and endogenous returns to ability *

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Abstract 10

This paper proposes a model of entrepreneurial turnover highlighting a non-monotone relationship between technological 11 change and ability-biased sorting into entrepreneurial types. Entrepreneurial decisions are examined in a two-stage model under 12 uncertainty in which entrepreneurs decide to abandon a project and start a new venture depending on technological change and on 13 ability. We show that technological change affects the quality distribution of entrepreneurship by increasing the ex-ante number of 14 entrepreneurs undertaking the most efficient projects and decreasing the post-entry number of entrepreneurs of low-quality firms 15 who choose to continue their initial business. A higher rate of technological change is therefore likely to induce a cleansing effect 16 on entrepreneurial activity and to alter the market perception of business creation.

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JEL classification: O33; M13

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Keywords: Entrepreneur entry and exit; Technological change; Selection; Stigma

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1. Introduction

The creation of new businesses and the decline or market exit of less productive firms are often regarded key to 25 business dynamism and economic growth in OECD countries. New firms play an important role as job creators and 26 firm turnover allows reallocating resources from low to higher productivity units. In fact, the entry and exit of firms in 27 fact accounts for approximately 30% of total productivity growth in OECD countries (OECD, 2003). Yet, survival rates 28 of new firms are strikingly low in many sectors. As documented by Scarpetta et al. (2002), only 30% to 40% of entering 29 firms survive beyond the first two years of life. Explaining the start-up of new firms, their extremely diverse chances of 30

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