
Innovation, information, lobby and tort law under uncertainty

Caroline Orset*¹ and Julien Jacob

¹Economie Publique, AgroParistech, INRAe, Université Paris-Saclay – Economie Publique, AgroParistech, INRAe, Université Paris-Saclay – France

Résumé

Recent environmental policies favour the 'pollutant-payer' Principle. This principle points out the pollutant financial liability for potential incident induced by its activities. Investing in technological innovations generates uncertainty on the future returns, as well as on the damages that such innovations could involve and on the cost to pay in case of troubles. To reduce this uncertainty, the firm has the opportunity to acquire information, for example through research activities, on its project's potential consequences on human health and on the environment. However, in their efforts to obtain and/or to maintain a marketing authorisation with the agency, firms may develop specific strategies to exploit scientific uncertainty. They may produce favourable scientific findings. In case of accident, the firm having this type of behaviour can be legally charged. We then analyse whether liability rules and tort law incentive the firm both to invest in research and development in order to reduce the uncertainty and to decrease miscommunication on the results. We find that the firm's decision to stop or continue to sell its product depends on the levels of precision of the exogenous and of the endogenous information it receives, and on the ratio between marginal benefit and damages from maintaining the product in the future. We then understand that the firm's decision to adopt a lobby behaviour depends on its expected payoff, its level of research, and its belief being sentenced when it has chosen to adopt a lobby behaviour. Finally, we clarify the effect of the penal liability on the firm's investment in research decision. The level of the fine pushes the firm to reduce its uncertainty about the risk of accident. However, if it perceives that the risk of accident is high, its investment in research will decrease with the level of the fine for maintaining its expected payoff.

Mots-Clés: innovation, uncertainty, health, environment, law

*Intervenant