Summaries of Articles

Théorie de la dynamique économique : une réévaluation de la tentative de Nicholas Georgescu-Roegen, by Philippe Dulbecco and Pierre Garrouste

Nicholas Georgescu-Roegen is well-known, first because he importantly contributes to the so-called standard economics, and second because he undertakes to set up a bioeconomics. The Lakatosian Methodology of Scientific Research Program and his proposal to combine "internal" and "external" history of the growth of scientific knowledge help us to appraise the Nicholas Georgescu-Roegens will to build up a new Scientific Research Program. Our conclusion is a negative one.

Keywords: Nicholas Georgescu-Roegen, economic dynamics, history of sciences, thermodynamics, time and uncertainty, economics of production.

Journal of Economic Literature classification numbers: B3, B4.

Une approche évolutionnaire des négociations internationales en présence de problèmes environnementaux globaux, by Pierre Courtois, Jean-Christophe Péreau and Tarik Tazdaït

This paper deals with precautionary behaviour within negotiations of global environmental problems. We show that precautionary behaviour can arise in case of both a negotiation failure and of an environmental agreement settling. In the first configuration, precautionary behaviour has lower impacts than full cooperation. It reduces however the magnitude of defection. In the second configuration, and if the size of the agreement signed is low, precautionary behaviour is shown as being a means to widen cooperation. To end, we show that the adoption of a trade sanction on non cooperative behaviours does not warranty large cooperation.

Keywords: global environmental problems, coalition, unilateral commitment, evolutionary strategy.

Journal of Economic Literature classification numbers: D74, D78, Q28.

Aspects stratégiques d'une politique environnementale incitative, by Yolande Hiriart

We analyze an environmental policy initiated unilaterally by an industrial country which objective is to reduce a global pollution. In an international trade framework, we study the effects of such a policy on the geographical distribution of production, on the global level of emissions, and on the clean technology research by the firms. We mainly show that strategical considerations lead governments to *laxist* policies. This *ecological dumping* result is robust to the kind of competition since it can be obtained in a price competition as well as in a quantity competition.

Keywords: Multinational, transfer pricing, international tax policy, profit shifting. Journal of Economic Literature classification numbers: F12, F18, H21, Q28.

Noxious facility and monopoly: siting and pricing, by Denis Lescop

A community of agents decide to provide itself with a noxious facility. To do so, they call on a firm that will be in charge of the siting and the construction of the facility. In such a context, the firm propose a siting/pricing mechanism to the community. Under incomplete information, we show that optimal mechanisms facilitating the siting and pricing of the facility exhibit allocative inefficiencies due to the informational rent given to each agents. In two cases drawn from the general cases (diffuse extenailities and local externalities), we fully characterize the optimal auction.

Keywords: auctions, negative externalities, collective goods.

Journal of Economic Literature classification numbers: C72, D44, H41.

A paradoxical risk aversion effect on the consumers' demand for quality, by David Bardey

In this article, we consider a demand model for a durable good with unknown quality. The quality of the good is uncertain in the sense that the consumer ignores (ex ante) whether the good will break down or not, higher quality implying a higher probability of survival. Taking into account this uncertainty around the quality, we show that the demand for quality can, paradoxically, decrease when consumers are more risk averse. We prove that this risk aversion effect can disturb the second-order price discrimination policies applied by some firms. We reveal the link between quality demand and self-protection theory.

Keywords: vertical differentiation, risk aversion, self-protection.

Journal of Economic Literature classification numbers: D81, D82, L12.