Incentives in the Drèzian Mixed Tâtonnement/Non-Tâtonnement Hedonic MDP Procedure for Global Warming[*]

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Abstract

This paper designs a decentralized planning procedure for optimally adjusting the quality of goods and the global atmosphere which can be considered as a complex of Gorman-Lancasterian attributes in the New Consumer Theory. This process called the *Hedonic MDP (Malinvaud-Drèze-de la Vallée Poussin) Procedure* is constructed by using the necessary conditions for the efficient combination of *tangible attributes* embedded in the goods produced by the countries, and greenhouse gases (GHGs) as *gaseous attributes* emitted by them. Sen's capability approach is also used, since the impacts of global warming upon each country affect its *functionings à la Sen*, which determine its national beings. It is shown that any country maximizes its national happiness function by consuming and producing goods and emitting GHGs. *A Drèzian Mixed Tâtonnement/Non-Tâtonnement Hedonic MDP Procedure* or the *ζMDP Procedure* is proposed and the existence of a solution is proved. In a local game associated with each iteration of the procedure, it is verified that each country truthfully reveals its dynamic hedonic marginal willingness-to-pay for gaseous attributes of the global atmosphere and tangible attributes embodied in the goods.

Key Words: Drèze-Hagen's hedonic theory, dynamic hedonic marginal willingness-to-pay, Gorman-Lancasterian attributes or characteristics, Drèzian Mixed Tâtonnement/Non-Tâtonnement Hedonic MDP Procedure, national happiness function, New Consumer Theory, Pantaleoni effect, Sen's capability and functionings, ζMDP Procedure

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