EMISSION TRADING SCHEME IN THE MARITIME INDUSTRY: AN EXPERIMENTAL ANALYSIS

Abstract
The International Maritime Organization has proposed the implementation of a carbon dioxide emission trading scheme for the industry. Two problems associated with this is that of high noncompliance rate and the need to reconcile the both IMO and UNFCCC principles. There is a lack of literature on the implementation of an Emissions Trading Scheme (ETS) for the maritime industry despite recognition for market-based tool to complement the sector’s technological efforts to clean up emissions. This study employs experimental techniques to study the implementation of the ETS in the maritime industry. A stylized experiment model is developed to incorporate features of the maritime industry. Two key findings from this study are, (1) Implementation of the dynamic enforcement model reduces both permit noncompliance and report noncompliance relative to the static enforcement model and (2) The initial allocation of permits, which provides a solution to reconcile the two conflicting principle, impacts on the efficiency of the scheme.

Keywords Emission Trading Scheme, Experiment, Maritime, Dynamic Enforcement

About The Speaker: Dr. Antony T.H. Chin, associate professor at the National University of Singapore and was member of several committees with the Ministry of Trade and Industry. He has been consultant to the World Bank, Asian Development Bank, The European Bank for Reconstruction and Development, Provincial Governments in China, Singapore Airlines, Port of Singapore Authority, Land Transport Authority. His research interest includes investment appraisal (economic, financial and cluster) of transport investments, application of behavioural and experimental economics in influencing choice behaviour, port and airport competition, road pricing strategies and environmental impacts from transport. He was awarded the Hanjin Prize, at the International Association of Maritime Economists Annual Conference 2012.

* There will be an interactive session with students after the seminar at 4.30pm

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