To what extent could an LNG export organization, operating a uniform pricing or volume control mechanism, influence LNG trade in the Atlantic Basin?

Potentially the market for LNG is available but the risk allocation and rent-sharing mechanism is changing drastically. A pertinent question resulting from the gas cartel discourse is whether LNG faces the great risk of market manipulation. The work essentially questions the economic soundness and statistical feasibility of using a uniform pricing or volume control mechanism to influence LNG trade in the Atlantic Basin. Uniform LNG Pricing, here, implies an agreement about LNG export price or pricing structure by a group of LNG Exporting Countries. Volume control refers to any form of export control (by issuing quotas or supply manipulation) to influence the market. Whatever the mechanism, the ultimate aim of is keeping price higher than it would have been.

The author combines quantitative, descriptive and theoretical analyses to investigate the possibility of uniform pricing or supply restriction. Five exporters and five importers are used in a simple linear programming model of Atlantic LNG Trade. The net revenue function is the optimization function subject to the following constraints - Capacity (Supply), Price (given/otherwise), and distance (transportation). Subsequently, sensitivity exercises of different market scenarios were analyzed. Uniform pricing scenario: Exporters uniformly adopt a minimum absolute price level/floor ($x). Volume control scenario: LNG supply quotas are issued in proportion to existing contracts, liquefaction capacity, as well as, gas reserves (i.e. indirectly placing quantitative ceilings on exports).

The outcome reveals that:

- Given demand: exogenous price or export restriction is feasible by exploiting the substitution cost of end users rather than competing to be the least cost producer;
- A volume control mechanism is possible without breaching contracts;
- When the demand assumption is relaxed both influence mechanisms could be adopted jointly in order to firmly defend price at any level and influence the market;
- In both scenarios, the distribution of the profits among the exporters would be very complex (either reaping profit on the basis of quotas or sharing equally or by a combination of both);

To the extent that demand exists, Atlantic LNG Exporters could influence Atlantic Basin LNG trade with either a uniform price mechanism, supply restriction or both. Continued dependence on LNG for marginal gas supply and the tightness of supply could make LNG a swing source and marginal price-setter. Further enhancing exporters influence in the region.