**The Influence of European Gas Hubs Liberalization on Competition and Gas Pricing Formulas Transformation**

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**Abstract**

**Objectives/Scope:** The main objective of the paper is to identify whether development and liberalization of European gas hubs lead to transformation of contract mechanism, pricing indexation, competition type change, restricting factors of this processes and suppliers structure variance. The suppliers will be studied as a matter of actual practice: USA as possible LNG supplier, Russia as asserted on the market and internal European supplying countries (UK, Holland, Norway). All EU countries are studied and considered as consumers.

**Methods, Procedures, Process:** The study process is under three main theories: incomplete contracts, market manipulation, pricing on imperfect markets. To analyze the problem, econometric, stochastic, game theory, and incomplete contracts modeling approaches were used. Preliminary, statistical analysis for the data was completed; three econometric models were developed: gas demand, gas supply structure in the current pricing model, and gas supply structure in conditions of price indexation change. Secondly, the results were applied into the incomplete contracts model for gas hubs. Finally, incomplete contracts model is used in construction of perfect Bayes equilibrium game to generate possible outcome for gas hubs’ contracts and pricing mechanism. **Results, Observations, Conclusions:** A single market of basic economies was one of the keystone for European integration and gas market was one of them to be consolidated. Three directives were adopted and aimed at forming perfect competition among suppliers, information asymmetry exclusion, regulation of the third parties etc. Not all efforts resulted in goals set and gas market in EU continues developing. Being the first importer in the world, EU gas market development is of great practical and science interest. 10 factors influencing supply and demand, contract structure and effectiveness of pricing formulas in liberalization process were analyzed. Our results show that four factors affect, mostly, the market: alternative energy, energy consumption, CO2 emissions, and GDP growth with demography. Finally, a model of incomplete contracts for gas market in Europe involving the results of supply/demand modeling was developed, by identifying the factors, which gas hubs’ contracts depend on. A game model based on the perfect Bayes equilibrium type of market games is expected to be developed, assuming the presence of market manipulation. Thus, to identify the behavior of consumers and suppliers that changes contracts’ structure on the market.

**Additive Information:** The main problem is not about the available practice, but the theory. Understanding the processes of imperfect market is essential for government, suppliers and consumers and allows us to develop strategies, model macroeconomic processes, and model internal firm economic processes. It also allows us to understand the root problem of the current market and identify whether it is worth studying or not.