

Abstract

Understanding the Lack of Competition in Natural Gas Markets: The Impact of Limited Upstream Competition

Motivated by the slow emergence of competition after the natural gas market in the Czech Republic was liberalized, I explore the impact of upstream competition on the downstream level. I extend standard Cournot models to understand current and likely future developments, paying particular attention to the impact of market liberalization on a country characterized by a lack of domestic production and limited foreign upstream competition. I show that the upstream producer might exercise his market power to capture some of the benefits of liberalization and increase the wholesale price, which hinders the desired decline of the end-user price in the long run. This pricing change in turn makes the entry of new players in the transition period more difficult. This problem might be mitigated or even completely reversed if upstream competition develops simultaneously with downstream liberalization.

What Role Does Storage Play in the Liberalization of the Natural Gas Market?

Focusing on the liberalization of the natural gas market in the Czech Republic, in this paper I explore the impact of the structure of natural gas storage on the development of competition and prices after market liberalization. I extend standard Cournot models to understand current and likely future developments, paying particular attention to the impact of market liberalization on a country characterized by a lack of domestic production, limited foreign upstream competition, and highly concentrated (and bundled) control over an essential input in the production of the final product: gas storage. I show that bundled and unregulated control over storage does not promote competition. When ownership unbundling of storage is implemented simply by transferring the facilities to a separate company, lack of further mechanisms enables the storage operator to use its market power and set high prices for the storage service, leading to a loss in consumer welfare in comparison with the pre-liberalization case. On the other hand, consumers might benefit from higher welfare if access to storage service is regulated.

Investigating the Effect of Ownership Unbundling on the European Electricity Market

One of the most debated measures of the recently ratified third energy liberalization package is the ownership unbundling of the transmission system operator from the supply and generation function in all EU member states. In this paper I empirically investigate whether ownership unbundling has an effect on the prices of electricity for both industrial and household customers in those countries where it has been already implemented. I find that ownership unbundling does play a significant role in the development of prices. I also find that the effect of ownership unbundling differs across countries and in particular that it is related to the institutional quality of a country. In countries with good institutional quality, much of the benefit of market opening was realized without ownership unbundling and the more perfect separation of the transmission system operator is accompanied by price stagnation or increase. On the other hand a decline in electricity prices due to ownership unbundling may be expected especially in old member states with lower institutional quality.