Structural and policy drivers of the EU energy crisis: Exploring their nexus beyond current exogenous shocks

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Overview

Natural gas is an important source in the energy mix of both advanced and emerging economies and a driver of industrial and economic development. The recent surge in prices worldwide comes against the belief emerged in recent years of the definitive advent of an era of low gas prices. This is likely to have substantial repercussions on the dynamics of development and on the welfare of many countries, particularly if they are large consumers and importers, as in the EU. While agencies and analysts are attributing the causes of the current energy crisis in the EU mainly to a temporary convergence of exogenous shocks, for example the post-covid economic recovery and the war in Ukraine, this article identifies also long-term structural and policy factors endogenous to the energy sector. This is done by exploring the causal relation between liberalization reforms and trends in gas supply in three major gas markets – UK, US, and EU. Through the lens of Transaction Cost Economics, the paper finds that domestic production of energy is a key factor determining the success of policies for market competition, price affordability and energy security. All the three cases show that although liberalization is effective for reducing prices in times of gas abundance, it causes the opposite effect in times of scarcity. This suggests that in contexts of domestic scarcity and high dependence from imports, such as in the EU, policy should contemplate the coexistence of models based on both market competition and vertical integration to take advantage from low spot prices in periods of international abundance and contain the surge in periods of scarcity.

Methods

The paper adopts the methodology of the comparative case study (see Collier, 1993; Dion, 2003; Flick, 2006; Yin, 2009). The selection of the cases – UK, US, EU – follows Dion's (2003) creteria, which suggest that cases should be selected based on similarities on the variables to control for and on differences in the variables under investigation. In this paper, the countries selected have all mature and large natural gas markets, while more importantly, their liberalization reforms are in a advanced stage (comparing to other relevant gas markets worldwide). The variable under investigation is how the effectiveness of liberalization reforms (associated with low domestic gas prices) changes at different levels of domestic supply, with the EU being characterised by domestic scarcity, the US by abundance, and the UK having transitioned from abundance to scarcity.

Results

The UK, US and EU cases suggest that in conditions of gas oversupply, liberalization policies can successfully achieve the objectives of enhancing market competition and reducing final prices. However, it is necessary to clearly define the causal relationship between the two key factors – abundance of gas and infrastructure in relation to liberalization policies – and their respective influence on price reduction. In fact, the abundance of gas is an essential condition for the virtuous functioning of a competitive market. Without it, there would be no room for new competitors to increase their market share at the expense of established companies by offering lower prices to consumers.

Conclusions

The current worldwide surge in natural gas prices is hitting mainly import dependent countries, first and foremost in the EU. This comes against the belief emerged in recent years of the definitive advent of an era of low energy prices, brought about by increasing market competition and diversification towards renewables. The current supply shortage seems to have caught the EU unprepared and still in a transition stage in its path towards a more competitive and green energy market, suggesting that reforming the energy sector in the EU cannot overlook one of its defining features: the persistence of a strong dependence from imports. Drawing from the experience of policy reforms adopted in the major world gas markets, the paper shows why liberalization is effective for reducing prices in periods of oversupply, while its benefits are offset in periods of shortage, such as the current one. The paper suggests immediate actions to overcome the current crisis and long-term policy directions to pursue price affordability and energy security

References

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