

Publication

Assessing supply security - A compound indicator

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Supply security is a prominent and crucial notion which finds application in various economic sectors (energy security, food security, supply chain risks). Yet, it remains particularly difficult to define and measure. Currently used indicators of supply security focus on narrow approaches and offer limited guidance to policy makers. Considering this, we propose a novel indicator assessing the supply security of industries, conceptually or physically, based on a network structure. The indicator is based on a simulation methodology and evaluates the reaction of the market to disruptions of its network services, thereby capturing the various dimensions of supply security. Subsequently, we perform an exemplary application onto the European natural gas market, and evaluate the impact of currently debated network extensions projects and policy measures.

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