## Russia – Ukraine gas conflict: implications for the EU

Once again Russia and Ukraine are having a conflict over their annual gas dealings. This conflict does not only affect these two parties but also the European countries that rely on Russian gas transiting via Ukraine for their own gas consumption. A substantial number of these are member states of the EU, or in the process of becoming so. There is a real threat of supply disruption and a lack of security of energy supply for this area. Hence, there are implications for the European Union and the ongoing discussion of a common energy policy.

In particular, the current conflict puts the issue of a solidarity rule between the EU member states in the lime light. The idea is that member states would at least partly insure each other against possible supply disruptions by promising to redistribute energy from a non-affected member states to the affected ones. One fundamental question is the feasibility of such a rule, given the diverging interests between the member states. This comment will take a closer look at this issue.

## The unequal effects of the crisis on EU member countries

Russia provides a quarter of the EU gas supply, of which 80 percent passes through Ukraine. The current crisis affected as many as fifteen countries across central Europe (see map below). However, the impact on these countries is not equal. In particular it depends on the location of the receiving country, and its energy consumption profile.

As seen from the map below, some EU countries are severely affected while others are only partially affected, and some countries are not affected at all. This implies that some countries could take on the role as alternative provider (from natural source or storage) of gas in the face of a conflict over Russian gas.



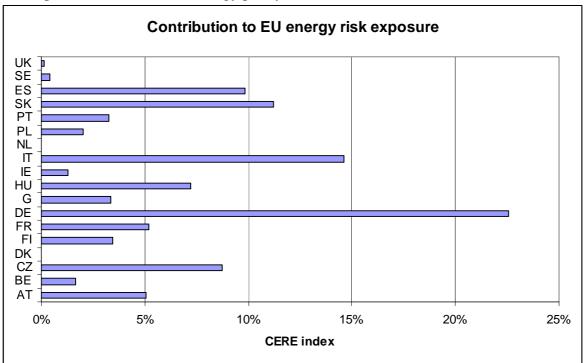
COUNTRIES AFFECTED BY CRISIS

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The gas consumption profile can also explain how much each particular country is affected by the current gas crisis. The household sector is known as the least elastic sector in terms of gas consumption. This means that countries with a high degree of dependence on Russian gas in their *household sector* will be most severely affected. Even though the gas consumed by households does not represent much of the total gas consumption, its disruption has a great political impact and is well covered by the media (as it is the case in the today's crisis). Hence, it is not only the access to Russian gas that matters, but also the elasticity of domestic demand (for further reference see P. Noel (2008)'Beyond Dependence: How to Deal with Russian Gas', Report for the European Council of Foreign Relations).

## Gas supply's risk exposure in the EU

Access to gas supplier networks and domestic consumption profiles are only two basic dimensions that will influence a country's risk of (and sensitivity to) gas supply disruptions, and, hence, their motivation to adopt a solidarity rule. To go further Le Coq and Paltseva (2008) have constructed a general index for EU countries of their short term energy risk exposure. This index includes reliance on Russia as well other non-EU suppliers, such as Algeria. It combines measures of energy import diversification, political risk of the supplying country, risk associated with energy transit, and the economic impact of a supply disruption for gas. They find that the overall EU risk exposure differs across member states. Figure 1 shows the CERE index that is constructed from the point of view of the EU rather than particular member states. It measures the relative impact of each member states on the aggregate EU risk. Not surprisingly Germany and Italy are the largest contributors. Yet, smaller countries like Hungary and the Slovak Republic are also in the top risk group due to them relying almost entirely on non-EU suppliers (including Russia) for their gas imports. These results give an indication of member states varying motivation for adopting a solidarity rule as part of an EU common energy policy.



Source: Le Coq & Paltseva, 2008, Measuring the Security of External Supply in the European Union.

## Consequences for a common European energy policy

Is a European energy policy based on a solidarity rule feasible? Yes, in terms of EU member states complementing one another in terms of risk it is feasible, but it may still be difficult to implement.

Suppose that the EU adopts a common policy with its member states sharing the overall EU energy supply risks. To face an energy supply disruption like the current one, a solidarity rule is suggested. This means that member states that are not affected by the disruption would provide gas to affected members, by i) using their own source or ii) reducing their storage. This solution might meet with resistance.

First, in the short run it is unlikely that individual member states will be able to change their contribution to overall EU energy risk exposure (see figure above). This implies that their preferences over a common energy policy are likely to differ, which might lead to policy tension. In the case of a solidarity rule, one group of countries would be beneficiaries and while the others would be providers of inter-EU compensatory gas transfers. In the short run, these roles are not likely to change. This argument suggests that an adequate design of a common energy policy needs to include a way to compensate the "losers", if a solidarity rule is to be accepted on at all. Second, because the solidarity rule would constitute a mutual insurance system, a moral hazard problem could arise. In effect, such a system allows member states to share the costs of a gas supply disruption, which may make them care less about the disruption in the first place – and actually lead to increased (risky) gas consumption. To avoid this problem, a common EU energy policy needs to be backed up by a strong regulatory agency that can coordinate between countries and take overall EU consumption risk into account. See Le Coq and Paltseva (2008) 'Common Energy Policy in the EU: The Moral Hazard of the Security of External Supply for extended version of these points).

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