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Research Report

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The Centralization of Natural Gas Procurement in the EU: An Economic Perspective

In this policy brief, we review the main trade-offs associated with joint procurement, or procurement “centralization”, as identified by procurement scholars. We then focus on the specific case of natural gas. Finally, we compare the procurement of natural gas to that of COVID-19 vaccines, arguing that the centralization of natural gas procurement can be expected to bring greater benefits at lower costs.



KEY MESSAGES

- Centralizing procurement invariably entails trade-offs.
- Yet not all products or services involve the same trade-offs. When it comes to the centralization of gas purchasing, the benefits (e.g. monetary savings) appear to clearly outweigh the costs (e.g. coordination efforts).
- We anticipate that the centralization of natural gas procurement would be much more effective than that of vaccines, making the former a valuable policy tool for shielding EU firms and citizens from rising energy prices.

JOINT EU GAS PROCUREMENT AS A MEANS OF PREVENTING ENERGY PRICE SPIKES

The political and public debate on the joint procurement of natural gas in the EU dates back at least to the year 2014.¹ The issue has been highly controversial and the opinions of individual governments have diverged considerably. Some countries have been concerned about price fluctuations, while others have claimed that they are bound to long-term supply contracts, or that centralization would distort the EU market.² Since the start of the Russian–Ukrainian war in 2022, however, a consensus has emerged concerning the need to reduce energy dependence on Russia while protecting European households and businesses from rising energy costs. Accordingly, joint gas procurement is now more widely accepted as a potential solution to this dual problem.³ To contribute to the current discussion, we review the main trade-offs inherent to joint procurement, or procurement “centralization”, as identified by procurement scholars, while focusing on the specific case of natural gas.

The main benefits of procurement centralization include: lower prices, by virtue of greater purchasing power, which increases the leverage of the purchaser while tapping economies of scale;⁴ lower administrative costs, due to fewer tenders and contracts; improved management, due to the need for fewer procurement officers – and the resulting ease of auditing their performance and integrity – and the availability of resources to hire more qualified staff; and positive informational externalities, with the disclosure of centralized procurement prices encouraging lower decentralized prices.⁵ Costs are typically associated with the need to set up a coordination unit or a central procurement office; the difficulties in adapting to specific local needs; the loss of relationships with local suppliers; reduced control over non-contractible quality dimensions; and possibly higher barriers to market entry, thus reducing competition.⁶

When it comes to the centralization of gas purchasing, the benefits tend to outweigh the associated costs; indeed, the cost-benefit analysis is much more favourable for natural gas than for other products and services. This is attributable first and foremost to the nature of natural gas as a fairly straight-forward, standardized commodity. An additional factor is the structure of the market, which features just a few incumbent suppliers, due to resource monopolies. At the same time, most of the general benefits enumerated above apply to natural gas (although economies of scale and technical competence may be less relevant). On the other hand, the above-listed costs do not weigh heavily in the case of natural gas – although other, specific short-term costs could arise. By way of example, terminating or modifying existing long-term contracts could be legally problematic. Alternatively, it might be necessary to expand European pipeline networks, as governments tend to plan national pipeline networks for distributing gas within a country rather than between countries.

Previous debate on centralized gas purchases in the EU

Benefits vs. costs of procurement centralization

Centralizing procurement of natural gas implies similar benefits at lower costs

1 <https://sustainableenergylaw.blogspot.com/2014/11/joint-buying-of-gas-at-eu-level-good.html>.

2 https://www.euractiv.com/section/politics/short_news/germany-not-interested-in-joint-eu-gas-purchases/.

3 <https://www.reuters.com/business/energy/eu-leaders-agree-jointly-buy-gas-lng-this-year-summit-draft-statement-2022-03-22/>.

4 According to 2020 figures, joint EU purchases would mean consolidating up to 16.7 of annual world trade in liquefied natural gas and 47.6 in non-liquefied natural gas. Source: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-natural-gas.pdf>.

5 Information externalities leading to indirect savings in procurement centralizations are discussed in Spagnolo and Lotti (2022). See here: https://cepr.org/active/publications/discussion_papers/dp.php?dpno=17019.

6 “Handbook of Procurement”, ed by Nicola Dimitri, Gustavo Piga and Giancarlo Spagnolo for a detailed discussion of such trade-off. See here: <https://www.econbiz.de/Record/handbook-of-procurement-dimitri-nicola/10003361536>.

This is not the first time that centralized procurement has been considered or used in the EU. A recent example is that of COVID-19 vaccines. A steering committee chaired by the European Commission and member states with experience in vaccine negotiations and production was established for this process. Under EU procurement rules, companies were held responsible for the safety of the product – even after market approval. The Commission contributed up to 50 per cent of the total production costs associated with vaccine purchases. Despite lower procurement costs, centralized purchasing of vaccines in the EU did not proceed smoothly by international standards, particularly with regard to the speed of vaccine roll-out.

In the United Kingdom and Israel, by comparison, vaccines were introduced more quickly and populations were vaccinated faster. The UK put a venture capitalist in charge of operations and provided her with a relatively large amount of money up front. She invested a billion British pounds – and, importantly, was provided with a great deal of personal discretion in the selection of suppliers, who were guaranteed complete immunity from liability in civil suits. Israel’s contract award process was extremely rapid, and the country shared all health data with manufacturers as a form of additional payment. EU procurement and data protection rules made all of these options non-viable. In addition, some unlucky decisions were made in the EU. For example, Sanofi’s vaccine development was supported, but in the end unsuccessful. Most importantly, the need to involve all national governments slowed down negotiations. Indeed, it seems that the greatest friction was the constant need to coordinate between Member States.

However, policy coordination and/or the full-fledged delegation of authority to a central procurement unit would appear easier to achieve for a mature and standardized product like natural gas. Procuring COVID-19 vaccines was challenging for many reasons, including the underlying R&D process, the pressure for a rapid development, the high upfront costs for manufacturers, and the high failure rate in clinical trials. These specifics made a high degree of buyer discretion another important requirement for efficient outcomes. Natural gas is a different story, however: we would anticipate centralization to be much more effective for this commodity, even given rigid procurement rules.

Lessons learned from the centralized procurement of COVID-19 vaccines

The United Kingdom and Israel ended up being more successful in vaccine procurement than the EU

We expect the centralization of natural gas procurement to be effective as a policy tool



ZEW policy brief

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