

Discussion of

Natural Gas and the Macroeconomy: Not All Energy Shocks Are Alike

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*The views expressed here do not necessarily represent those of the Bank of England or of any of its Committees.

This paper

- ▶ **Question** What are the macro and financial effects of gas supply shocks?
- ▶ Why is it important?
 - * (Obviously) very topical issue, scant evidence
 - * Good reasons to believe gas \neq oil
- ▶ **This paper**
 - * Narrative identification of gas supply shocks
 - * Quantification of their effects with daily local projections and monthly proxy SVAR

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My comments

[# 1] **The perils of taking averages**

[# 2] **Strengthening the identification**

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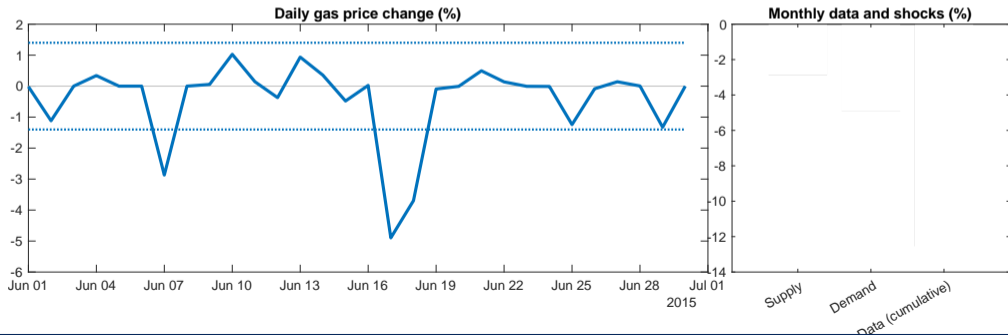
► Approach redux:

- * Identify events characterized by large daily TTF futures variation (125)
- * Narratively classify events as Supply (50) or Demand / Unusable (75)
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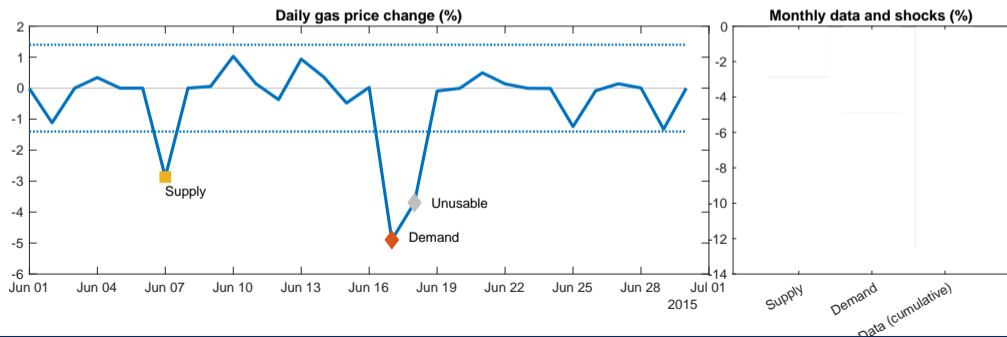
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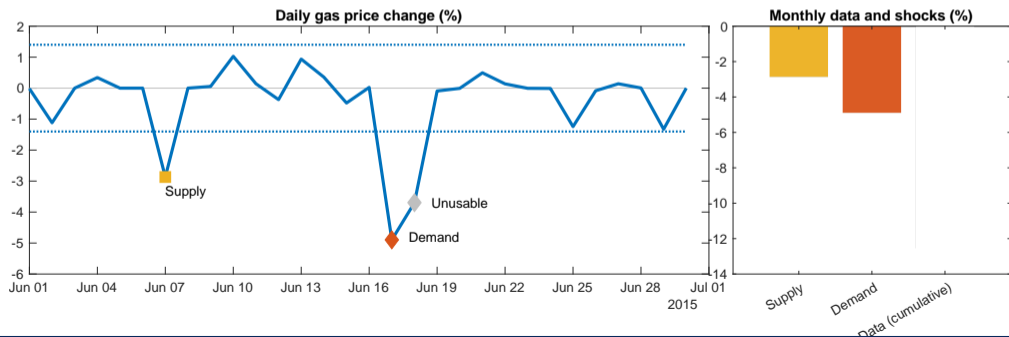
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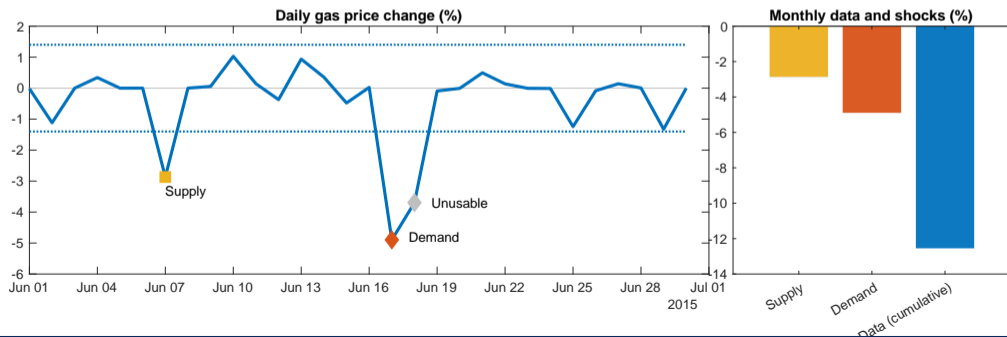


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- ▶ Averaging can 'pollute' the monthly proxy and lead to a violation of the exogeneity condition
 - * Especially with small samples or few events

- ▶ **Question** How much of a concern is this for the analysis in this paper?
 - * Unlikely to be a severe problem as *ip* falls, but could introduce a bias in the IRFs
 - * Could 'quantify' the severity of the problem as you observe both Supply and Demand

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[# 2] **Strengthening the identification**

Strengthening the identification

- ▶ Classic demand vs. supply identification problem → Exploit data on both price and quantities?
- ▶ **Suggestion** Identify the gas supply shock in a VAR with sign and narrative restrictions
 - * Add gas quantities to the Proxy SVAR $X \equiv [gas^p, gas^q, core\ hicp, ip]$
 - * Sign restrictions exploiting comovement between price and quantities
 - * Narrative restrictions exploiting most uncontroversial events
- ▶ Benefits
 - * Better use of narrative analysis (i.e. not only supply events)
 - * More precise pre-Covid estimates (shocks)

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Could also use equity prices



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Odds and ends

- ▶ Could further validate identification by looking at sectoral / firm-level responses
[Berthold, Cesa-Bianchi, Haberis, Di Pace ('23)]
- ▶ Why do the IRFs from VAR and LP look so different?
[Plagborg-Møller and Wolf ('21)]
- ▶ VAR stability (error bands increasing over time)
- ▶ How do you deal with heteroskedasticity?
- ▶ Would be interesting to compare the financial effects of gas and oil shocks
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In sum

- ▶ Really nice paper on an important issue
- ▶ Scope to refine and robustify the identification approach
- ▶ Results could be even sharper