Gas markets as a globalizing system

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Aad Correljé
New Gas supplies: Investments & Timing??

- What will bring the new supplies to market and when
  - Security of supply for EU
  - Security of demand for suppliers
  - Available capital
  - Pace and mode of liberalisation
  - Geopolitical and other risks
Gas markets as a globalizing system

- Transit issues become important
- Value chains stretches out over several (different) jurisdictions
- Systems of governance stem from different institutional traditions
- Variation in maturity and spatial characteristics of systems
- Divergent interests between suppliers and consumers
A complex global gas trade dynamic is emerging as the market becomes increasingly interconnected.
Import dependency of EU Gas Market

Source: EUROGAS
Provisional data for 2005
EU and Russia

2.0 tcm

25% purchased from Gazprom

GAZPROM
28.4 tcm
only 7.0% sold

EUROPE
2003
523 bcm

> $200 bn

June 29, 2011
Major Gazprom’s Export Gas Pipelines

80% of export gas is transported via Ukraine
Northern European Gas Pipeline

Main characteristics of Vyborg - Greifswald section (one line):
- capacity: 19.2 bcm/year
- length: 1189 km
- diameter: 42"
- pressure: 22 MPa
Gazprom Production

[Diagram showing Gazprom production from 2002 to 2012, with different regions and satellite regions indicated by different colors and segments.]
The promise of LNG......, or???
Several jurisdictions..
From variation to convergence?

• Interaction of regional gas markets (EU, US, Asia and Latin America), via long distance pipelines, LNG chains and indigenous production?
• Variation between these systems and consequences for:
  — coordination of investments along the supply chain
  — security of supply issues
• Need for intra-regional and/or inter-regional convergence
• Implications for the regulatory concepts and approaches?
Two Economic Perspectives

• Structure Conduct Performance
  — Degree of Concentration > Competition > Efficiency:
    ➢ Unbundling, free entry plus regulation of monopoly elements

• Transaction Costs and Institutions
  — Transaction > Risk > Coordination > Efficiency:
    ➢ Vertical integration and contracting structures, ex post/ex ante regulation