Ukraine and Security of Gas Supplies to Europe

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• The current situation
• Gas in Ukraine’s economy and politics
• Options for diversification
• Conclusions
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A looming gas crisis?
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Domestic production can only cover non-peak demand.
A looming gas crisis?

Russian gas is supplied to fill up storages.

These supplies are then used to meet UA winter demand.
Ukraine’s storage stock and Russian alternative pipelines are not sufficient to avert the potential crisis.

Diversion from Ukraine to these routes is limited.

undelivered gas in January
Ukraine’s storage stock and Russian alternative pipelines are not sufficient to avert the potential crisis. Ukraine starts offtaking gas from transit pipelines.
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Half of Ukraine’s GDP depends on gas-consuming industries

High gas price represents some danger to the growth-generating industries as well as Ukraine’s macroeconomic conditions.
Economic and gas dependency on Russia

Both Russia and Europe are important for Ukraine’s economy.
Both Russia and Europe are important for Ukraine’s economy, but Russia is more important for economic & energy security reasons.
Ukraine’s gas transit pipelines - strategic weapon?

- Reduction in Ukraine’s gas transit volume to Europe is due to diversion of gas to Nord Stream (Russia-Germany pipeline)
- Russia was able to diversify away from Ukraine since 1991 reducing its reliance on Ukraine from 95% to 49% at the moment
- After the South Stream, another bypass pipeline, is completed Russia’s dependence on Ukraine will zero
Ukraine’s economy: regional snapshot

Ukraine’s GDP (2012) = $182bn

Ukraine’s economy: regional snapshot

Gas consumption by sources and regions

- East: Imports and Production
- Centre: Imports and Production
- West: Production
- South: Production

Imports
% of total consumption (rhs)
Import dependence (rhs)

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Ukraine’s economy: regional snap shot

Ukraine’s GDP (2012) = $182bn

Ukraine’s politics: regional snapshot

Source: BBC
Ukraine’s politics: regional snapshot

**Ukraine's divide**

**2010 election results**

Gas consumption by sources and regions

- East
- Centre
- West
- South

- Imports
- % of total consumption (rhs)
- Production
- Import dependence (rhs)

Source: 2001 national census

- Steel plants
- Chemical plants
Russian gas price affects economic competitiveness of Ukraine’s industrialised east

Bubble size = total imports from Russia (bcm)

- Gas dependent exports (metal and chemical products)
- Mostly exports of services (i.e. non gas dependent)
Russian gas strongly influence Ukraine’s foreign & energy policies

Bubble size = total imports from Russia (bcm)

Economic incentives (Russian gas and export market) & cultural factors for ‘eastward’ foreign policy

Preference for Integration with Russia (% of respondents)

Share of industry in regional gas consumption

- South
- East
- Centre
- West
Russian gas and corruption strongly influence Ukraine’s foreign & energy policies

Barter madness: 12 million galoshes for 4 million people in a 40°C heat

After the fall of the Soviet Union, high inflation rates and scarce hard currency made cash transactions unattractive in countries such as Ukraine. Instead, resources such as oil and gas were often swapped for other items which the country was in short supply of – food products, fertiliser, metal, equipment. Before the Russian financial crash of August 1998 this trade in barter dominated Ukraine’s energy sector; it has been estimated by one commentator in the Financial Times that 90% of all energy commodities in Ukraine in the mid to late 1990s was paid for in barter.158

Russian gas **and corruption** strongly influence Ukraine’s foreign & energy policies

Ukraine’s energy policy =

state capturing in the energy sector

+ Undiversified economy which depends on energy imports and inefficient energy sector

+ regional difference in dependency on Russian gas for production of key export commodities

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Potential non-Russian supply options for Ukraine

- Current imports from Russia
- New reverse flow from Slovakia
- Existing reverse flow from Poland & Hungary
- Unconventional gas
- Conventional gas
- Adria LNG (Croatia)
Potential non-Russian supply options for Ukraine

• How much diversification would Ukraine need?
  – How much gas would Ukraine receive from Europe?
  – At what price?
Potential non-Russian supply options for Ukraine

- How much diversification would Ukraine need?
  - How much gas would Ukraine receive from Europe?
  - At what price?

This would depend on international gas markets.

- 120 mmtpa of LNG from NA & low energy demand from Asia
- 25 mmtpa of LNG from NA & high energy demand from Asia
Variable costs for non-Russian supply options

- Conventional gas
- Unconventional gas
- Reverse flow options from Europe

New import price from Russia

$/tcm vs. bcm/a
Variable costs for non-Russian supply options

LNG market is tight

New import price from Russia

Conventional gas

Unconventional gas

Reverse flow options from Europe

So the obvious & cheap solutions that are discussed may turn out to be not so cheap
Conclusions

• Supply disruption to Europe is unavoidable unless Ukraine and Russia find an agreement very soon or unless Ukraine is able to import more gas in the reverse mode (from Europe)

• The role of Ukraine as a transit country is diminishing with the construction of pipelines that bypass Ukraine

• Gas and cultural politics play central role in Ukraine’s foreign and energy policy

• the economics of reverse flow options are rather questionable
Thank you

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