



RUSSIAN AND CIS GAS MARKETS AND THEIR IMPACT ON EUROPE: the January 2009 Russia-Ukraine gas crisis

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IEEJ, Tokyo, February 4, 2009



**Forthcoming February 24, 2009
from Oxford University Press**

Russian and CIS gas markets and their impact on Europe

Edited by Simon Pirani

**Chapters on: Natural gas in transition: systemic reform issues –
Russia – Ukraine – Belarus – Moldova – Azerbaijan – Armenia –
Georgia – Turkmenistan – Kazakhstan – Uzbekistan –
CIS gas trade and transit**

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CIS gas balance 2007

<u>bcm</u>	<u>Prod'n</u>	<u>Import</u>	<u>Total balance</u>	<u>Cons- ump'n</u>	<u>Export</u>
Russia	651.0	7.4	658.4	466.5	191.9
Belarus	0.2	20.6	20.8	20.8	–
Ukraine	20.4	50.6	71.0	71.0	–
Azerbaijan	11.0	0.5	11.5	11.5	0.1
Kazakhstan	29.2	7.2	36.4	21.2	15.2
Uzbekistan	65.3	–	65.3	50.8	14.5
Turkmenistan	72.3	–	72.3	21.1	51.2
Others	0.5	6.4	6.5	6.5	0.03
Total	849.5	92.7	(942.2)		273.0



Gas in the CIS: big themes

- The move to market pricing (post-Soviet transition continued)
- Production. The recession means that a Russian supply squeeze may be avoided
- Transit bottlenecks (Ukraine is most important)
- Gas consumption ... the great unknown



Gazprom Exports to CIS Countries 1995-2007 (Bcm)

	2000	2003	2004	2005	2006*	2007*
Ukraine	27.2	26.0	34.4	37.6	59.0	54.3
Belarus	10.8	10.2	10.2	19.8	20.5	20.7
Moldova	1.8	1.5	1.9	2.8	2.5	2.7
Caucasus	0	0.5	0	6.9	7.6	2.7
TOTAL CIS	40.8	38.2	47.1	71.1	96.1	81.3

Sources: Gazprom in Figures 2004, p.30, Annual Reports: 2004, p.47; 2005, p.55; 2006 p.49; 2007 Interfax. *includes RosUkrEnergo re-exports; statistical basis of data is different to previous years

All countries expected to pay “European prices” by 2011, Ukraine starting in 2009??

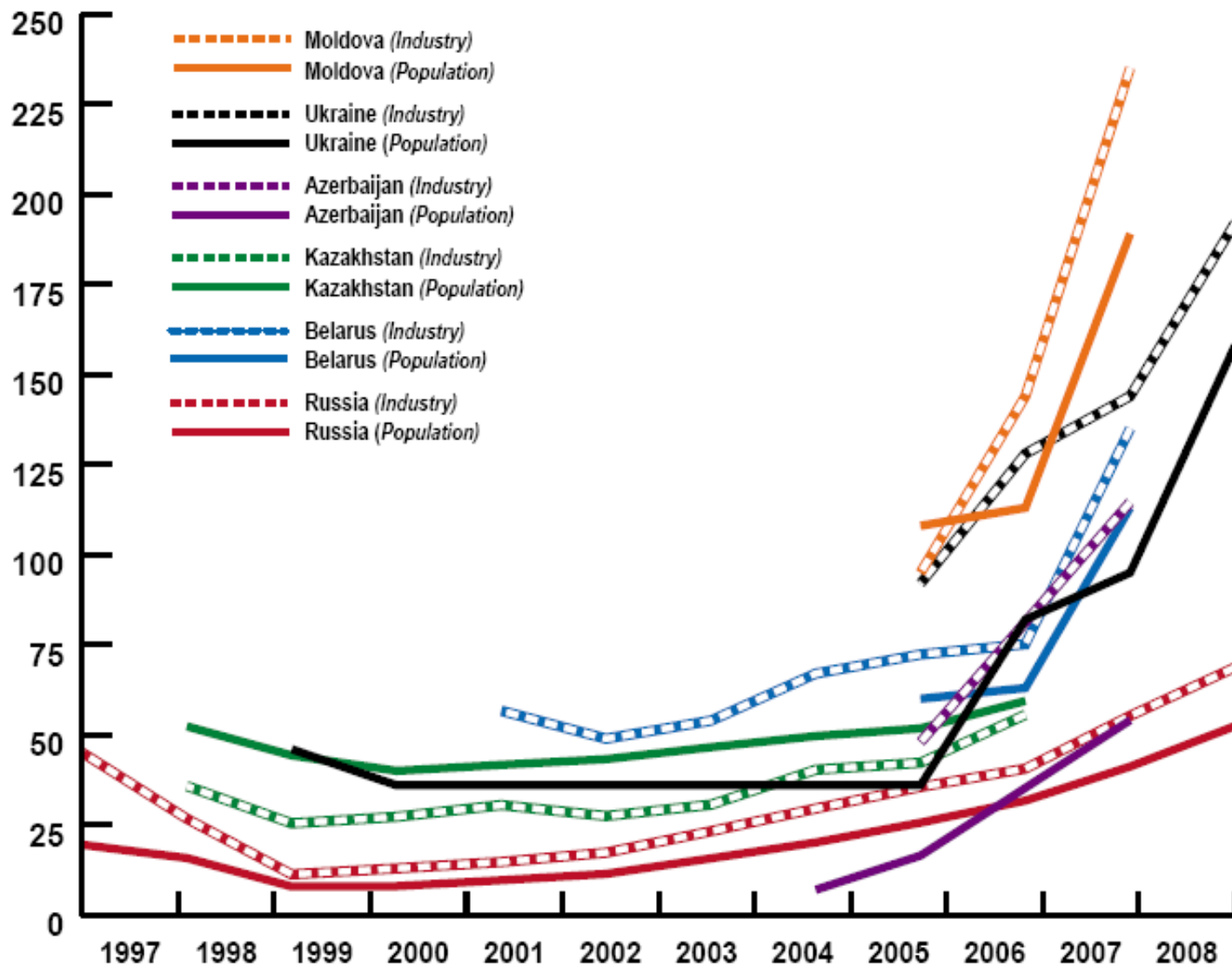


CIS import prices for Russian gas, \$/mcm

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Ukraine	44-80	95	130	179.5	240?
Belarus	46.68	46.68	100	119.25	n/a
Moldova	60-80	110-160		170 -210	191?
Georgia	65	110	235	235	235
Azerbaijan		110	(sales stopped)		
Armenia	55	110	110	110	110



CIS domestic gas prices 1997-2008 (\$/mcm)



Exchange rates and non-payment are problems

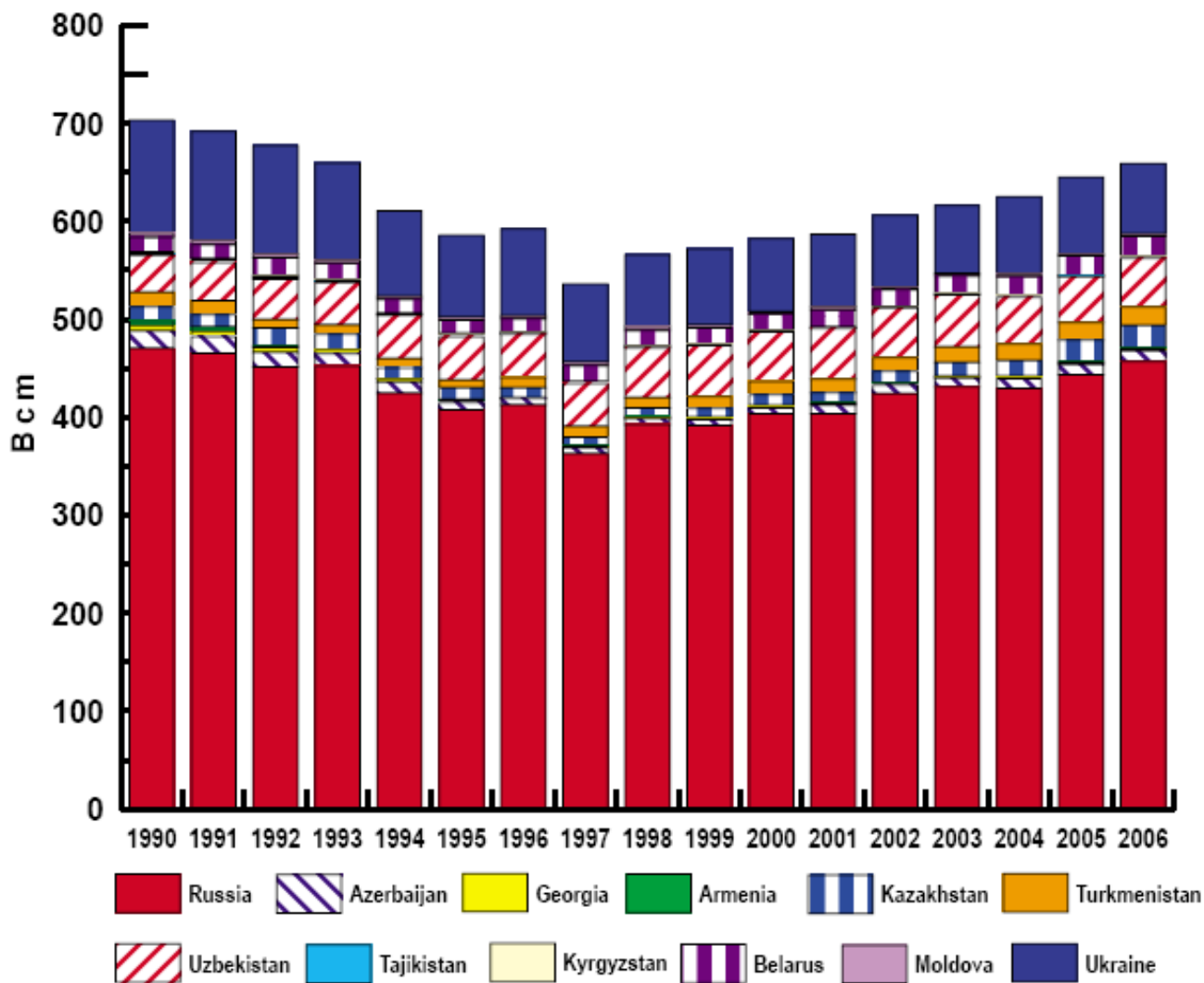
CIS production up to 2015

Table C.1: Projections of gas production up to 2015 (bcm)

	2007	2010 (proj.)	2015 (proj.)
Russia – Gazprom	548.6		480–580
Russia – non-Gazprom	101		150–200
Turkmenistan	63–68	88–110	119–141
Uzbekistan	65.3	67–75	67–75*
Kazakhstan**	29.6	39.8	70–80
Ukraine	19.5		22–25
Azerbaijan	11.5		30–35
Total	838.5–843.5		938–1126

Note: Belarus, Georgia, Tajikistan and Kyrgyzstan, which each produce less than 1 bcm/year, are not included.

CIS Gas Consumption (Bcm)



Source: CIS Annual Statistical Review 2006



The January 2009 Russia-Ukraine Gas Crisis

Origins are important



The Russo-Ukrainian gas trade in outline

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u> <u>(est.)</u>	<u>2009</u> <u>(proj.)</u>
Ukraine – gas (bcm)					
Consumption	68.9	65.9	62.8	61	61
Technical gas	7.4	8.1	7.0	7	7
Imports	55.8	53.3	49.1	48	48
Own production	20.5	20.7	20.7	20	20
Price (\$/mcm)	\$44- \$80	\$95	\$130	\$179.5	\$175- \$360
Total value of imports	\$3.2bn	\$5.1bn	\$6.4bn	\$8.4bn	\$13.5bn



Ukrainian gas transit in outline

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u> <u>(est.)</u>	<u>2009</u> <u>(proj.)</u>
Volumes transported (bcm)					
To Europe	121.5	113.8	112.1	113	117
To the CIS	14.9	14.7	3.1	3	3
Cost of transit (\$/mcm/100km)	\$1.09	\$1.60	\$1.60	\$1.70	\$1.70
Total value of transit services	\$1.5bn	\$2.2bn	\$2.1bn	\$2.2bn	\$2.3bn



Putin-Timoshenko deal, October 2008

- ❑ Import prices and transit tariffs to reach “market, economically based” levels by 2011
 - ...that should mean, European netback*
- ❑ Gazprom to sell central Asian gas to Naftogaz Ukrainy
 - ... so Rosukrenergo would lose its lucrative transit contract*
- ❑ Gazprom subsidiaries no longer unwelcome in Ukrainian market
- ❑ Ukraine to pay off debts by 31.10.08



Why that agreement failed: the economic background

Russia

- The oil boom is over
- In 2009, European gas prices will follow oil prices down, with serious consequences for Gazprom's revenues
- The state remains heavily dependent on oil and gas
- No time to compromise on low import prices for the CIS

Ukraine

- Industrial production down 26.6% year-on-year to December
- Silver lining on the recession cloud: gas demand falling
- The terms of trade turn against Ukraine: steel prices falling, gas import prices rising
- Among the European nations most vulnerable in the financial meltdown

How Ukraine was cut off

Ukraine

- left it to the last moment to pay its debts
- sent a letter threatening to divert gas bound for Europe (a reminder of 2006)
- used gas from storage (17 bcm), while hoping for the price to come down

Russia

- warned loudly that gas would be cut off

International sympathy for Ukraine faded since 2006

- The Energy Charter Secretariat reminded Ukraine of its obligations
- The IMF confirmed that Ukraine had sufficient money to pay its debts



A Chronology of the Crisis

- Started with dispute over unpaid debt which impacted on....
- 2009 sales and transit contracts
- January 1, 2009 – Gazprom cuts all supplies for Ukrainian consumption
- January 1-4, “small” volumes 65.3 mcm “stolen”
- January 6: gas supplies to Europe drastically reduced
- January 7: gas supplies to Europe cut off
- January 11: EU monitors deployed
- January 13-15: Gazprom attempted to resume flows but this proved impossible; Ukraine claims lack of “technical agreement” prevents resumption of flows
- January 17-18: Political agreement reached
- January 19: 10 year supply and transit contracts signed
- January 20: European gas flows restart
- January 22: European gas flows returning to normal



**2009 RUSSIA-UKRAINE CRISIS WAS
THE MOST SERIOUS GAS SECURITY
INCIDENT EVER EXPERIENCED IN
EUROPE AND ONE OF THE MOST
SERIOUS ENERGY SECURITY
INCIDENTS**

**EUROPE LOST 20% OF ITS GAS
SUPPLIES FOR TWO WEEKS IN THE
MIDDLE OF WINTER; SOUTH EAST
EUROPE LOST NEARLY 100% OF GAS
SUPPLIES**

Commercial Outcome

The new Russia-Ukraine supply and transit contracts

- Import prices set quarterly. 2009: 80% of European netback, avg under \$250/mcm. 2010: 100% of European netback
- Separate contract on transit. \$1.70/mcm/00km this year, formula similar to European ones from 2010
- Rosukrenergo transit contract scrapped
- Gazprom-Sbyt will supply half of Ukraine industrial market

No information yet public about

- The remaining 2008 debts of >\$600m
- Storage ... sales to central Europe (formerly by RUE)

Russia and Europe

- Gazprom “disappointed” EU wouldn’t discuss a pipeline consortium. EU says Ukraine and Russia untrustworthy



Immediate Consequences

Ukraine

- transit reputation wrecked
- has to survive until it can benefit from falling prices
- Oligarchs influence politicians, but this is not critical to the causes or outcome

Russia

- Gazprom lost ~\$1.5bn of sales+penalties+possible damages
- This is not about an “energy weapon” aimed at Europe
- Reputation as a reliable supplier is seriously (fatally?) damaged
- This is not just about prices and transit fees (gap between the two sides was bridgeable)
- Ownership and management of the Ukrainian pipeline is now high on the agenda of all sides



BUT....it wasn't all about gas

- **“unfinished (political) business” between Yushchenko and the Russian leadership from the Orange Revolution**
- **Internal power struggle between Ukrainian President Yushchenko and PM Timoshenko who are already “running for president” (January 2010)**
- **Role of Ukrainian oligarchs, especially Dmitri Firtash – CEO of Group Firtash which owns the Ukrainian part of RosUkrEnergo – which is being excluded from Russian-Ukrainian gas trade**



And.. problems are likely to continue

- **Ukrainian ability and willingness to pay for gas uncertain due to:**
 - **collapse of Ukrainian economy and currency**
 - **bankrupt status of Naftogaz Ukraine**
 - **instability of political system and antagonism between president and PM**
- **January 2009 crisis shows that Russian exports to Europe cannot continue without flows to Ukraine**



European Consequences

- North West Europe – hardly inconvenienced
- Central Europe – some cutbacks, especially Slovakia
- South East Europe – disaster, especially: Bulgaria, Romania, Serbia, Bosnia, Croatia

Much discussion of Nabucco and other long term supply options

Urgent action needed to supply emergency gas to SE Europe during winter months if necessary



Longer Term Consequences

- Monitoring of Russian- Ukraine gas flows – especially in winter, likely to be reinstated
- Russian determination to phase out Ukrainian transit and accelerate Nord Stream and South Stream
- Any increase in Russian deliveries to any European country will be under scrutiny
- Major emphasis on addressing south and east European supply security strategies

Russian-Ukrainian – and Russian-European – gas relations have irrevocably changed



Russian gas transit routes to Europe





Nord Stream Gas Pipelines



Will this crisis now overcome Baltic opposition to the pipeline?



Blue Stream and South Stream Pipelines



South Stream becomes urgent for security reasons



Russian Gas Pipeline Capacity to Europe 2008-2015 (Bcm)

	2008	2010		2015	
PIPELINE CAPACITY:	likely	Max	Min	Max	Min
Finland	5	5	5	5	5
Belarus	48	48	48	48	48
Ukraine	145	145	125	145	95
Blue Stream	16	16	16	16	16
Nord Stream	0	0	0	55	55
South Stream	0	0	0	47	30
TOTAL CAPACITY	214	214	194	316	249
Exports to Europe*	165	180	170	200	180
Spare capacity	34	34	24	116	69

*estimated long term contract minimum/maximum commitments



CIS Gas Markets and the Russia-Ukraine Crisis: some conclusions

- **CIS gas markets are among the biggest in the world**
- **Internal and external dynamics are complex and unstable**
- **Consequences of this instability are very important for European gas markets**
- **Russia-Ukraine crisis was the most serious breakdown of gas relations ever**
- **European customers – especially in SE Europe - got badly hurt which will lead to...**
- **Actions in CIS countries and Europe in relation to new pipelines and storages BUT**
- **These will cost a lot of money and not happen quickly**