

19 June 2014

# The Role of 'European formulas' in the Russia-Ukraine Gas Debate

| By Andrey Konoplyanik, Moscow

**The current Russia-Ukraine gas debate has been making the international media headlines though it has been discussed there mostly from political angle. Being interviewed recently in “Quest means Business” at CNN, I was asked by Richard Quest whether I “think that energy is being used as a diplomatic and political tool by Russia in this case”? This question reflects, from my point of view, a key perception that Russia is using its gas supplies to Ukraine as a 'political weapon'. This perception is being spread internationally by means of what President Obama has recently called “our [US] ability to shape world opinion” and “mobilization of world opinion and international institutions served as a counterweight to Russian propaganda”.**

Thus, cancellations of Russian price discounts for Ukraine since the beginning of the second quarter of 2014 were interpreted as a pure politically motivated unilateral price increase to the restrictive non-market-based level. Such explanations have created a 'domino effect' of a further negative wave in public opinion against my country and a natural wave of sorrow for the current political leadership of Ukraine as if it is a victim of politically-motivated actions of the Russian state and its state monopoly Gazprom. Backed by such an international environment, current Ukrainian authorities have made the fulfillment of their payment obligations for already delivered gas under the existing legally-binding Russia-Ukraine 2009-2019 gas supply contract, dependent on a new agreement to be reached with Russia on the gas price level.

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This stipulates a vicious circle of misunderstanding in the international world of the economic side of the gas relations between Russia and Ukraine. Let me try to explain some economics of the contractual gas relations between the two, thus trying to present – in a pluralistic democratic world – another view on the story, presented from another, maybe less attractive and less popular in the today's environment, legal

and economic angle. And leave it to the reader to consider whether it is “Russian propaganda” or not.

In my view, the origin of the Russian-Ukrainian gas story goes back to 1962, to the very beginning of the development of a large-scale EU gas industry. In 1959 the Groningen gas mega-field was discovered in the Netherlands. In 1962 the country announced its new gas export policy aimed at the monetization of maximum marketable resource rent from development of its non-renewable energy resource – Groningen gas. The basic economic concept was to link the price of gas to the replacement values (prices of gas substitutes in the end-use) to make it competitive in the long-run on the competitive energy market. This is why the formula pricing mechanism was established through which price adjustments were made automatically (today this is done on a quarterly basis) and reviews of the pricing formula itself could be negotiated on a regular (today it is done usually once in three years) and irregular (when both parties agree that the situation has changed substantially at the given market) basis.

This gave birth to the so-called 'Groningen model of long-term gas export contract' (LTGEC) with the gas price linked (indexed) to its substitutes in the end-use. Indexation to petroleum product prices is known as 'European formulas'. This provides a balance of interest for the contractual parties: consumers receive the lowest possible price among competitive supplies/suppliers/energies while producers receive the highest possible marketable price which makes their supplies competitive at the competitive market and prevents them from further increasing their price in search of maximum (but then non-marketable) resource rent.

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The principle of maximization of resource rent by sovereign states was subsequently protected by the international soft and hard law. In December 1962 UN General Assembly Resolution #1803 was adopted on "Permanent Sovereignty Over Natural Resources" (soft law) which gave nations the right to develop their natural resources to the benefit of their own population; it was replicated later in international hard law - in Art.18 "Sovereignty Over Energy Resources" of the legally binding Energy Charter Treaty which came into force in April 1998. Both pieces of international law provide legal background to the "Groningen" economic concept of maximizing marketable resource rent by the sovereign state from development of its non-renewable energy resources. This means - to sell them at maximum marketable (in order to be competitive) price.

In 1968 Soviet gas supplies to Western Europe started being based from the very beginning on Groningen LTGEC model . This model has since been gradually spreading to the entire "Broader Energy Europe" outside the EU – throughout the territory covered by fixed immobile gas infrastructure from end-user market in the EU to the well-heads in Norway, Northern Africa, Western Siberia and Central Asia. But until 2006 Russian gas was exported to Ukraine at a discounted virtual 'political' price, the level of which was calculated to balance Russia's payment obligations to Ukraine for gas transit to the EU.

Until 2006 Russian export gas supplies to Ukraine and Russian gas transit supplies through Ukraine to the EU were bundled. Russia paid Ukraine for its gas transit to the EU by gas in kind. Its volumes were calculated at virtual and discounted levels of both transit tariffs through and export gas price for Ukraine. These payments for transit in kind established most of Russian export supplies to Ukraine.

In 2004 the leaders of Ukraine Orange Revolution announced their desire for Euro-integration which means, inter alia, the aim of establishing EU rules within Ukraine. But in 2003 the rules in the EU gas markets had changed - the Second EU Energy Package came into force which has unbundled capacity and commodity markets in energy in the EU, and also has unbundled EU vertically integrated companies by separating transportation services (natural monopoly business) from other businesses within energy value chain. Since then the existing Russia-Ukraine gas practice of bundled transit and supply contracts began to differ from the European practice, which was to be implemented in Ukraine in case of electoral success of then Yuschenko-Timoshenko tandem.

Transportation tariffs in the EU (capacity use price) were based on cost of service, and gas (commodity) prices were based on its replacement value, and thus were mostly indexed to the price of petroleum products. The first was relatively stable, the second depends on oil price fluctuations. Since the contracts were separated and since they were now concluded between different pairs of market players (exporter and importer in supply contract, exporter and operator of transportation system in transit contract) no payments in kind between the two based on virtual prices and tariffs were possible anymore within the EU.

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This is why in May 2004 the then Ukraine Presidential candidate V. Yuschenko has requested to unbundle transit and supply contracts and to move to European formulas in gas relations with Russia. In my view, this was a natural next step in the 'domino effect' of Ukraine's proclaimed (intention to) move to Euro-integration. Yuschenko's expectations were that as a result Ukraine would receive higher European transit

tariffs which were considered to be about 2.5 times higher than those virtual discounted transit tariffs for Russian gas through Ukraine. And at the beginning of the 2000s oil prices were still relatively low (within the range of 20-ies USD/bbl), their rise began just after 2004, then spiraled and have reached a historical maximum of 147 USD/bbl in July 2008.

In January 2006 Russia and Ukraine unbundled their supply and transit contracts. Russia has converted to European formulas only the portion of its gas export to Ukraine that originated from Russia. Re-exported volumes of Central Asian gas (its title of ownership belonged to Russia as it was bought by Gazprom at external borders of Central Asian gas exporting states and then sold as already Russian gas to Ukraine) stayed at low-leveled cost-based pricing till 2009, which made it possible to downgrade the average price level of Ukrainian gas import significantly through 2006-2009 to help this country to adjust – step by step – to higher prices in its transition to European formulas.

Price discounts for Russian gas deliveries to Ukraine in 2006-2009 were organized in the form of mixing two flows of export gas. The first flow presented smaller volumes of gas produced in Russia with European formulas (replacement value-based pricing indexed to petroleum products prices in the EU) and thus higher gas price levels (since international oil prices began to increase quickly from 2004 onwards). The second flow presented bigger volumes of re-exported Central Asian gas with cost-plus pricing and thus lower price levels. They were contractually mixed (weighted) to reach intermediate lower level export prices for Ukraine. That was done at the financial accounts of the newly established intermediary RosUkrEnergO. It was economically and legally needed in this chain for there to be such an instrument to soften Ukraine's transition to new gas price levels resulting from European formulas. In order to prevent Ukraine to re-export to the EU at higher market prices of gas imported from Russia at discounted prices, there was an agreement between Russia and Ukraine that all imported gas from Russia is to be consumed entirely in Ukraine.

And it was only from 2009 onward that Groningen LTGEC model with European formulas began to be used in the whole Eastern part of the 'Broader Energy Europe'. In January 2009 Russia and Ukraine signed their 10-year supply contract on this basis, and later that year Russia (as gas importer) and Central Asian states (as gas exporters) signed similar contracts as well.

So when the unbundled 10-year gas supply and gas transit contracts, based on European formulas, were finally signed in January 2009 between Russia and Ukraine, then Ukrainian Prime Minister Y. Timoshenko, – in my view, by coincidence, and not as a result of implementing “a diplomatic and political tool by Russia” - has received high gas prices as a function of long-desired European formulas. The reference period (the previous 9 months) on which this function was based happened to include the historical maximum of oil price of mid-2008.

To soften the transition of Ukraine to European formulas which resulted in higher gas price levels for Ukraine since 2009, Russia has been introducing four different price discounts since then: all of them present unilateral gestures of Russia's goodwill to Ukraine. In the contract itself the immediate 20% discount for the whole of 2009 was included which has lowered the initial contract price from 450 USD/mcm (as calculated by the formula) to 360 USD/mcm. This first discount expired in 2010. So in April 2010 the so-called “Kharkiv agreements” were signed which brought down the Russian gas price for Ukraine by 100 USD/mcm (approximately by the same level as initial discount for 2009) through a mechanism of interstate clearing (budgetary cross-cancellation of mutual payment obligations): for the future prolongation of the lease of Russian Naval Base in Sevastopol in Crimea post-2017 (when the then existing lease agreement was to expire) Russia began to pay immediately (which means de facto with advanced payments) in the form of lowering the price of existing gas supplies to Ukraine by 100 USD/mcm. This was equal to the value of export customs duty on gas (30% of export price) that Gazprom was to pay to the Russian budget.

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This means that NAK (Naftogaz of Ukraine) as state company was not paying to Gazprom this 100 USD/mcm as a portion of market price calculated on European formula in the 10-year supply contract. Gazprom has not received this portion of the market price but has not suffered any financial loss since it has not re-paid this sum to the Russian state budget as customs duty. But the Russian state budget hasn't suffered loss either since it has not paid this sum for the lease of Sevastopol Naval Base to the Ukraine state budget. The latter, in turn, has not suffered since the debt of Naftogaz for gas purchases from Russia (the company has been reselling imported gas at the domestic Ukrainian market at subsidized prices at a loss) to be compensated from Ukraine state budget was lowered by this sum. The circle of clearing transactions providing the second gas price discount made everybody in the chain of actors (states and state companies) happy for as long as the legal background for the key element of the deal was there: the (advanced) lease payments for part of the then Ukrainian Crimea territory.

This second discount brought gas price for Ukraine to the level in the range of 385 USD/mcm (under current oil prices). It should be understood that Russia has proposed this discount as another unilateral gesture of good will to Ukraine since my country had enough financial resources to pay for the lease on the unbundled basis. This bundling was done not so much on a pure economic basis (it is much easier and effective to clear

the mutual debts), but mostly to reach an advanced prolongation of Sevastopol Naval Base lease, then part of Ukrainian territory.

The third discount was given on gas directly supplied to the Ukrainian chemical enterprises to make their final products more competitive at the international fertilizer market.

The fourth discount was presented by Russia in December 2013 and has introduced an additional (on top of the "Kharkiv's" one) 100 USD/mcm price discount pendant on full payment discipline of the Ukraine. This brought the price level for 1Q2014 to the range of 285 USD/mcm (under current oil price level). This additional unilateral discount on market-based prices based on the European formula was another solid material gesture of goodwill; it was followed by the first tranche of 3 bln USD from a 15 bln USD Russian loan promised to the then existing Government of Ukraine ( a tranche which is considered, at least by some experts including myself, to be a loan that is probably unrecoverable).

Unfortunately, even at this discounted price levels Russia has not been receiving the full price for its factually delivered gas: on top of previously existing debt for 2013, Ukraine has paid in full for factual off-takes only in January 2014, then only half in February, and none in March. Also none was paid for April-May, though from then on the price was calculated without discounts. The

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Kharkiv discount was annulled in April onwards since Crimea became part of Russia after the March 2014 Crimea referendum and so legal basis for continuation of Russia's payments for the future lease of Naval Base in Sevastopol post-2017 has lost its validity and legal background. The

December 2013 discount was annulled since the condition for its provision – payment discipline – was violated by Ukraine in 1Q2014 and further payments for already made deliveries (which were continued by Russia despite the ongoing non-payments) began to be conditioned by new Kiev authorities on renegotiation of the contract (which means de facto renegotiations of the European formulas).

Today's discussions on the validity of European formulas reflect the popular view in some (mostly non-professional) spheres that the internal gas market in the EU can be built based on the spot/futures transactions alone without term contracts. But in practice, two segments of the physical gas market will continue to co-exist in the import-dependent EU – contractual segment with LTGEC with indexation formulas (though continuously adjusted when/where the competitive situation in the given market changes), and spot segment. On top of this, a paper gas market (with futures contracts, financial gas-related derivatives – similar to the financial-oil-market instruments) will continue to be developed as well. LTGEC will stay first of all as an investment tool to develop new supplies (this is why spot pricing will not substitute indexation to replacement values in LTGEC).

In the today's EU, we see only in North-Western Europe a relatively competitive gas market with two segments where the consumer has the choice between spot and contractual gas supplies. Ukraine today does not have such a choice. It is totally dependent on Russian gas supplies by LTGEC with European formulas. If Ukraine would like to go to the lower gas prices than those provided by European formulas it needs to create oversupply on its gas market (like it happened in North-West Europe in 2009-2011) by developing alternative gas supplies and alternative energies, and improving energy efficiency. But this is "the long and winding road" (the Beatles). And there is no other way through this road then to pay the gas debt generated by European formulas.

In the next Opinion (to follow) I will refer to the issues of contractual off-takes, their investment consequences, correlation with reverse flows – both economic and legal components of the issue.

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