Geo-economic Conflict between Russia and the EU over the Gas Market Regime

Nikita Odintsov, Charles University in Prague

Abstract

This paper studies the underlying causes of conflict between Russia and the EU in the natural gas sector. The analysis approaches this problem through the lenses of geo-economics which synthesizes conflicting forces of political and economic structures of the international system. Dynamic nature of the energy markets gives rise to the four sources of geo-economic conflict: (1) distributional conflict; (2) interdependence; (3) shadow of the future; and (4) conflict over the regulation of economic activity. This leads actors at the different levels of the supply chain to pursue vertical integration. Yet exactly because of this conflict the end result is vertical disintegration.

Introduction and overview of the topic

It is commonplace to say that the gas trade between Russia and the European Union is characterized by interdependence. But, as the European Energy Strategy clearly shows, despite the strong economic rationale both actors have failed to achieve their mutual energy security. According to this Strategy "The most pressing energy security of supply issue is the strong dependence [on] a single supplier." Therefore, "The European Union must reduce its external dependency on particular suppliers [...]" (European Commission 2014, 2, 20). Obviously, this "particular supplier" must be Russia that satisfies about 30% of European gas demand. Russian gas supplies are now supposed to be a security issue. How did we come to this? The public debate has been politicized on the both ends of the gas pipeline long before the recent geopolitical tensions. Actually, Monaghan (2006) described this situation as "energy security dilemma." His concept is however rather an inductive conclusion than a theoretical explanation.

Therefore, I try to explain the economic underlying causes of the political conflict over the gas market regime and elaborate this dilemma. This paper is a qualitative study based on the field of International Relations. From a theoretical perspective this paper approaches the problem from the position of geo-economics. I use qualitative methodology that is based on the "explaining-outcome process-tracing" (Beach and Pedersen 2013), which shall uncover mechanisms behind the energy security dilemma. This paper shows that the economic changes in the gas market have a profound impact on regimes that regulate this market. These regulatory regimes influence the distribution of costs and benefits from the economic cooperation.

Therefore, this paper is interested in the causes of the conflict between Russia and the EU in the gas market and it asks whether both parties pursue similar – yet conflicting – objectives.

Theoretical background

Units of the international system are driven by the logic of two opposing structural forces. One is political, which is anarchic by its nature, where neither state can feel secure and must focus on relative distribution of power to survive (Waltz 1979). Another force is economic, where structure is rather hierarchic, division of labour is international or global and parties in order to maximize their utility and economic wellbeing come to contractual commercial relations. Yet economic development itself is uneven and some states are more economically advanced than others (cf. Reinert 2004).

Effective allocation of resources is undermined by the security needs of respective units of the international system. Economic activity itself becomes the source of power (Huntington 1993). Consequently, as Luttwak notes (1990), international competition in security field transcends geopolitics and distorts economic logic. This gives rise to geoeconomics, when the logic of conflict determines relations between states and interactions are based on the "grammar of commerce". Yet the logic of politics does not substitute the logic economics. There are two conflicting structural forces in action but both stem from the single international system. Hence, we can conclude that geo-economics is a synthesis of these two opposing forces that act on the concrete geographical ground (see Figure 1). Therefore, gas relationship between two political economic units (Russia and the EU), where geography plays important role (due to huge investments in pipelines and a spatially very long supply chain), shall be studied from the perspective of geo-economics.

As Gilpin stresses, "The logic of market is to locate economic activities where they are most productive and profitable", while "the logic of the state is to capture and control the process of economic growth and capital accumulation" (Gilpin 1987, 11). This leads to "the struggle among groups and states over the distribution of benefits and costs [...]" of economic activity (Gilpin 1987, 24). Even if in the short run all parties can find equilibrium in their interactions the transformation of the economic forces will redistribute gains between the parties. Since economic development is uneven, then the new distribution of gains is also uneven (Krasner 1991).

This constant struggle over distribution and redistribution of gains and power makes the international system dynamic. This dynamism brings about four sources of geo-economic conflict (they are effects of geo-economics): (1) conflict over distributions of costs and benefits from cooperation; (2) asymmetry of interdependent relationship; (3) unfavourable shadow of the future; and (4) conflict over the regulation of economic activity across the geographic space.



Figure 1: Theoretical synthesis

Sources of Geo-economic Conflict Relative gains calculations

In geo-economics, the problem of the unequal distribution of relative gains can be mitigated providing two conditions. First, there are no immediate concerns over the national security issues (Lipson 1984, 17). Second, "the pie" keeps growing. If, however, the pie stops growing or the distribution is too unequal the conflict looms large (Skaperdas and Syropoulos 1996).

Interdependence

Asymmetric interdependence has a feature of "relative opportunity costs of closure for the trading partners. The higher the relative costs of closure, the weaker the political position of the state" (Krasner 1976, 320). It can entail complete closure as was the case with oil sanctions against Iran, or it can be a partial closure that equals to diversification, which equals to increasing asymmetry of interdependence. In order to prevent closure one can seek the control of the source of its dependence (i.e. control of the supply chain) or can start preventive diversification – i.e. preventive closure (see Waltz 1979, 106).

Shadow of the future

According to the Neo-liberal logic the long shadow ensures the regularity of stakes over the long period and enables long-term cooperation. It provides enough information about the transactions and can improve compliance and thus diminish the fear of cheating (Axelrod and Keohane 1985; Keohane 2005). The problem arises when one can see that in the future the trade arrangement is deteriorating. This shadow of the future can provoke conflict especially if this trade is highly institutionalized (Skaperdas and Syropoulos 1996). There will be still regularity of stakes and long horizon of cooperation, but the terms of trade will change. This opens the distributive questions. The conflict will thus be over the trade regime that regulates the distribution of gains.

Regulatory regimes

Various types of international political economic regimes are possible. There can be a single regime that establishes uniform regulatory framework for the whole supply chain. Alternatively, each segment of the supply chain can be regulated by the separate regimes. Obviously, it is more economically efficient to have a single regime across the whole supply chain. Yet due to contradictory structural forces it is difficult to achieve this. Polit-economic units of the international system thus try to maximize their relative power and gains and achieve the most efficient resource allocation at minimal costs under the pressure of the contradictory forces of political and economic structures. Yet because of the dynamic nature of economic forces, even if at one point in time the regime satisfies the interests of all parties, over time unequal economic development would require the creation of a new regime that will create distributional problems again.

Conceptualization of Geo-economics of Energy

Members of the international system are characterized by the profit-seeking behaviour. Producers and exporters of energy resources aim at maximization of their resource (economic) rent (Hanink 2000). The geo-economic struggle is struggle over the distribution of this rent along the supply chain (cf. Noreng 2007, 171). Exporting countries and their national energy companies try to achieve this by expanding forward vertical integration and penetrate downstream markets. Companies from consuming countries, on the other hand, try to pursue backward vertical integration and to acquire stakes in upstream. Thus in accordance with relative gains calculations both the producers and the importers want to adjust distributional effect in their favour.

Politically speaking, such vertical integration can have two dimensions: legal and proprietary. Proprietary integration would mean that one company directly controls another company at the different level of the supply chain. Legal integration then relates to the regulatory regime that governs the terms of trade over the supply chain. Both types of integration have a direct impact on the gains-costs distribution. This regime can be truly international – agreed by all political units involved (nations states or the EU); or alternatively, one country can export its own regulatory regime abroad.

In the ideal world, regime creation shall reflect the economic state of affairs. Yet this can be compromised by the political logic. Even if effective distribution is achieved at *both* political and economic levels, the long-term stability is not guaranteed. Energy markets are not static. They undergo technological evolution, which proceeds unequally among parties (Konoplyanik 2010a). The initial growth, which is marked by the non-competitive market structure, proceeds through the intensive growth to the mature market (see Figure 2). This process is characterized by the growth of competition and changes of the contractual arrangements. Different states along the single supply chain can find themselves at the different stages of the market development. It requires a political intervention to change these regulatory arrangements and put them into the agreement with the market structure. Yet this transformation can be at the expense of the trading partner on the other level of the supply chain. This brings about four sources geo-economic conflict.



Figure 2: Evolution of gas markets: correlation of development stages, contractual structures and pricing mechanisms Source: (Dickel, Kanai, and Konoplyanik 2007, 60)

The maximization of rent strategy is usually accompanied by the concentration at the respective stages of the supply chain. In order to pursue vertical integration it is helpful to enhance its market power through concentration at its "own" level of the chain (again, in terms of ownership, regulation or both) – i.e. horizontal integration. Only then it is safe to go up or down the stream. These two processes (consolidation and penetration into the different levels of supply chain) are contradictory: forward vertical integration vs. backward integration. Because successful vertical integration presumes horizontal integration, efforts on both sides, which are designed to vertically integrate the supply chain, lead to vertical disintegration.

This effect we can call "energy security dilemma". Efforts of polit-economic units to increase its own "energy security" by achieving favourable rent distribution leads to vertical disintegration – exactly the opposite of what the units want. This does not mean that there is no regulatory regime along the supply chain. It just means there is no single regulatory regime because political and economic contradictions prevent market integration. Hypothetically, trading partners might come to such arrangement that would equally distribute gains between them. Yet the unequal development of energy markets prevents the long-term stability of such arrangement and the sources of geo-economic conflict emerge again.

In short, geo-economics of energy is not so much about security of physical supplies and demand or using resources as the instrument of power but rather it is about trade conditions of these supplies.

Regulation of the European energy space

As it was indicated the regulatory regime of economic relationship shall reflect the state of economic development. However, because of the problem of relative gains, dynamic nature of geo-economics and unequal economic development stability of the regulatory regime is unsustainable. This leads to geo-economic conflict over its adjustment. This process we can clearly observe in the EU-Russia gas relations.

Groningen model

At the beginning of the international gas trade in Europe, natural gas was considered to be too important to be left on European supranational bureaucrats. It was supposed to be part of the public service, whose provision was the responsibility of the national governments (Florio 2013). Hence, the Single Market, which was established in 1993, excluded energy from its scope. Instead, there were international markets that were governed by the specific arrangement, which is known as "Groningen Model." This model as its name suggests was introduced by the Dutch government when it started to export its gas from the Groningen field. As energy producer the aim of the Netherlands was to maximize its resource rent (Dickel, Konoplyanik, and Selivanova 2007). In order to win the market share the prices of gas were linked to the oil prices (or more precisely heavy fuel oil and gasoil and diesel) with some sort of discount – known as a "net back price mechanism" in the long term supply contracts (LTSCs). Physically gas was shipped to a delivery point where it was bought by a midstream gas merchant company. This company then sold gas to local distribution companies which sold this gas to the end users (Correljé, Groenleer, and Jasper 2013, 8). Since natural gas was alternative fuel for oil, gains from the economic cooperation were equally distributed. The long-term nature of the export contracts and take-or-pay clause ensured some sort of stability in the relationship in order to secure the return of investment. In other words, it ensured security of supplies and demand. The drawback was that the gas market was monopolized and the cross-border trade was limited (due to final destination clause). But because of the specific nature of the gas industry and because energy was considered to be a public service this situation was tolerated.

Quite soon the Soviet Union emerged as one of the largest gas exporters to Western Europe. From geopolitical perspective this on the one hand was a result of some sort of melting during the period of "Ostpolitik", on the other hand it also reflected persistent political and economic divisions between the two opposing blocks. The Soviet Union that controlled its Eastern satellites ensured the transit of its gas through COMECON countries up to the delivery point at the border between Eastern and Western blocks.

Since early 1990s the situation has become to change. Firstly, after the breakup of the Soviet Union, the collapse of the Eastern Bloc and consequent EU enlargement the delivery points of Russian gas appeared to be deep inside the enlarged European Union (Konoplyanik 2010a, 2014). Secondly, in 1993 the Single Market was formally established, but as it was mentioned, gas and electricity were exempted, since they were considered to be part of the public service. Yet, in 1994 the European Court of Justice ruled that "electricity was a good 'like any other' rather than a public service" (Yafimava 2013, 2). After this ruling the Commission immediately started to use its competences in the competition field and tried to liberalize electricity and gas markets.

Liberalization

From the beginning the Commission tried to frame the issue of the internal gas market in the terms of ensuring energy security in order to convince the Member States to grant direct regulatory power in energy sector to the Community level. But at that time there was no problem with security of supply. Countries such as Germany and France actually benefited from the special relationship with Russia and participated in Russian assets swaps strategy.

Russia in order to maximize its resource rent tried to achieve vertical integration and bypass transit countries – primary Ukraine – by building own pipeline system to supply gas directly to the delivery points, where gas would be bought by some company, which would be fully or partly owned by Gazprom, and which would deliver gas to the end-users. Reciprocally, European companies acquired shares in Russian upstream (Belyi 2009). This strategy, however, creates exclusive relationship between Russia and European countries, and their respective companies, while European gas market remains disintegrated.

Since the EU Treaties did not provide the European Commission with the legal basis for regulatory authority in the energy sector, the Commission used the ECJ ruling and applied its competences in competition policy area and pushed through the First and Second Gas Directives in 1998 and 2003 respectively (McGowan 2008). Yet as subsequent studies showed their impact was rather limited (Correljé, Groenleer, and Jasper 2013).

In the middle of the first decade of the 21st century too extensive dependence on Russian gas and adequacy of its LTSCs became more controversial. In 2005 (before the first gas crisis) the new Barroso Commission started its mandate with the identification of barriers to competition. One of the main targets was the energy sector (Eikeland 2011). Vertically integrated companies impeded not only gas-to-gas competition but also security of supply and switching to alternative fuels. Moreover, in 2004 former COMECON members were accepted into the EU and the new round of enlargement was also planned. These new Member States (MSs) were completely dependent on Russian gas, which in the eyes of the Commission represented a significant market failure.

Barroso report was presented against the background of the significant decline of domestic gas production and rising of oil prices and related growth of oil-linked gas prices in the LTSCs. Russia through Gazprom was able to increase its resource rent but at expense of the final consumers. Dominant midstream companies from their part passed the costs of their purchased gas to the end-users (Henderson and Mitrova 2015). With the segmentation of gas market and its monopolization the end users had little choice but to pay the price. This obviously had a negative impact on the EU competitiveness.

Besides that in 2006 Russian Parliament adopted the new law that granted Gazprom a legal monopoly on gas export, which effectively undermined Energy Charter Treaty provisions that the EU tried to convince Russia to ratify in order to get access to the cheap gas

from Central Asia. This step was part of the long term process in Russia to get a control over the "commanding heights of economy" and shall be seen in the context of Yukos case and the adoption of the subsoil law and investment law that limited foreign investment in energy upstream projects (Belyi 2009). The state thus wanted to get control over the upstream and its part of midstream supply chain in order to improve negotiating position with its Western counterparts and achieve some other goals not directly related to energy. This horizontal integration in Russia was accompanied with attempts of vertical integration in the EU to get a direct access to the European final consumers.

Hence, we can clearly see the gradual accumulation of the four sources of geoeconomic conflict. With the rise of the gas prices Russia, Gazprom and some companies from the EU were able to increase its profit at expense of energy intensive industries in the EU and overall economic competitiveness. Declining domestic production made the EU members more dependent on Russian gas that was sold under less and less advantageous conditions. Moreover, at that time it was expected that the prices would continue their growth and Russia through Gazprom would be able to penetrate the downstream market by further increase its resource rent and consequently pushing exclusive relationship down the market. In this regards it would mean that Russia and its counterparts in the Member States would regulate a significant segment of the EU economy. Furthermore, dispute between Russia and Ukraine in 2006 over gas prices resulted in the interruption of gas transit to the EU. Besides deterioration of Russian image (cf. Romanova 2014, 48) the LTSCs were also compromised as the arrangement that shall ensure energy security.

As a result in March 2006 the Commission issued the new Green Paper, where it stated that "Europe has entered into a new energy era" where energy prices are rising and the EU became more and more depended on imports of energy resources and especially gas. Hence, only when "fully competitive internal energy markets" exist "will EU citizens and business enjoy all the benefits of security of supply and lower prices" (European Commission 2006, 3). It also emphasized that the EU with united energy market is an "essential and equal partner in [...] the relationship" with Russia (European Commission 2006, 15). So it indicated that until the Member States integrate their gas markets into the single European market, Moscow will be able to exploit their dependence on Russian gas.

Towards Gas Target Model

2009 was a crucial year. It started with the second and the most severe gas crisis, when due to price disputes between Russia and Ukraine gas flows through this country were halted for 13 days. The economic crisis of 2008/09 and consequent economic stagnation caused decline of gas consumption in the EU. The shale revolution in the US then caused an oversupply of the LNG which led to the fall of the spot prices in Europe. This caused a significant disparity between oil-linked LTSCs and liquid spot markets in Western Europe (Stern and Rogers 2014).

Against this background the EU Commission was able to pass the Third Energy Package through the Council against the original opposition from Germany, France and some other countries. The Commission was able to secure the support from the energy intensive industries that suffered from the high prices and who lobbied their governments for adoption the Commission's proposal (Eikeland 2011). Liberalization provided these industries with access to the alternative gas from the spot market that was much cheaper than gas from Gazprom.

The main features of the new regulatory regime are vertical disintegration (unbundling) and third party access (TPA). TPA shall secure access to transmission capacities for alternative suppliers and to promote competition between them. This shall further support the development of the spot market. Basically it is a transition from gas-oil competition as it was in the Groningen model to the gas-to-gas competition. Also the Commission through various energy agencies has the final say on the European regulatory regime.

The idea of the final shape of the internal gas market was presented in the Gas Target Model, which was published 2011 and updated in 2015 and which favours short term spot market and even forward and future trading (Agency for the Cooperation of Energy Regulators 2015; CEER 2011). We can conclude that the strategic aim of the Commission is to break long-term contracts along the supply chain and to create a sort of "gas pool" (cf. Bosse 2011). This gas pool shall consist of interconnected spot markets with respective hubs delimited by the entry-exit zones, where gas would freely flow from the area of lower prices to the area of higher prices. This common pool shall be filled with gas via pipelines through various sources according to the market signals with no special arrangement as it was before.

With unbundling Russian strategy of vertical integration collapsed. Unbundling together with TPA means that while LTSCs stay in place, pipeline capacity allocation will now be based on the shorter term arrangement (Konoplyanik 2010b). While the LTSCs remain, the long-term transmission contracts have to be gradually changed (they already started to expire). This can create a threat of the "contractual mismatch" between LTSCs and shorter transmission contracts (Belyi and Goldthau 2015). Consequently, with enactment of the Network Codes that shall specify regulatory regime of the gas transmission Gazprom

might come under the indirect pressure to change its LTSCs even before they officially expire. If this Commission's strategy is successful the changes of the contract structure might finally shift the centre of regulatory gravity to the Commission. In this context shall be seen the antitrust case against Gazprom (European Commission 2015) – one of the allegations is the unfair pricing (which is though completely fair under the "old regime" (see Noel 2015)).

If Gazprom is indeed forced to change its contracts as it once did during the gas glut after 2009, the Commission hopes to get an access to negotiation of these contracts. For that purpose in February 2016 it proposed an update of security of supply Regulation and a Decision on intergovernmental agreements (European Commission 2016a, 2016b). The former requires energy companies to provide the Commission with the information after the conclusion of the contract; while the latter requires informing the Commission before the conclusion of the intergovernmental agreements on energy issues, which would effectively bring the Commission to the negotiating table.

From the geo-economic perspective the Commission wants to redistribute gains from the gas trade, which would be locked in the new regulatory framework. Indeed, the most liquid markets in Europe might benefit from this transition. Yet for Russia whose gas is produced far away from the final consumers it might increase costs and insecurity of the stable outlet. With unbundling its strategy of resource rent maximization through vertical integration has collapsed, and if the Commission is able to unify the downstream sector Gazprom's position will be weakened.

These European innovations are based on the logic of the transition to the more liquid gas markets that require more flexible arrangements between suppliers and consumers. Yet regulatory measures alone cannot create the internal gas market if there are in fact still many discontented markets in Europe with various levels of liquidity. There are only two markets that can be called liquid: British NBP hub and Dutch TTF. The rest are underdeveloped hubs (Heather 2015) with low density of pipeline network which make these markets isolated – especially those in the Eastern parts of Europe (Orlova 2016).

We can assume that from the Commission's perspective the LTSCs with their provisions regarding delivery points, destination clause (which already had to be abandoned), oil-indexation and their sheer durability hinder dissemination of liquidity from the West to the East. Therefore, in order to complete creation of the gas pool it is necessary to push Gazprom further away (both geographically and legally) from the end-consumer and to limit its ownership, operation and even access to the pipeline infrastructure. It is also necessary to substitute oil-indexation with spot price formula. From the geographic perspective it would be useful to change the delivery points and induce Gazprom to sell its gas on the hubs.

These strategic goals then can explain Commission's reluctance to exempt OPAL and South Stream from the Third Energy Package provisions, though much smaller projects got such exemptions. There is no qualitative specification that would determine whether exemption shall be granted. Therefore, the Commission can discriminate between various projects. The problem of these two Russian pipelines is that they would bring Russian gas directly to the delivery points bypassing transit countries (it is especially so in case of the Nord Stream pipelines). From the strategic perspective the threat of contractual mismatch shall induce Gazprom to change the LTSCs in accordance with the Commission's vision of the internal gas market.

The Commission has very limited power to directly change the LTSCs but it can opt for the indirect approach. First, the Commission discursively undermined LTSCs positive role in ensuring energy security. Second, it initiated regulatory changes that govern allocation of pipeline capacity that can create contractual mismatch, which might induce Gazprom to preventively change its contracts. Thirdly, it can try to block or impede constructions of new Russian pipelines. Fourth, it can use its power in the competition field to challenge oil indexation as it tries through the antitrust case against Gazprom. Fifth, by the liberalization of downstream market (the parts of supply chain behind the delivery point) it enabled the final consumers to get access to alternative cheap gas from the spot. This created pressure on the midstream companies – Gazprom's contractual counterparts that lost their monopoly but that are still bind with Gazprom by the LTSCs – to provide cheap gas to their consumers. As the result they were buying high and selling cheap. After 2009 they actually successfully pressed Gazprom to make some concessions and make the LTSCs more flexible – lowering take-orpay obligations, provide discounts and inclusion of hub prices in the formulae (Mitrova and Kulagin 2015).

In order to be successful the Commission must make spot market more attractive, which means that it must be more liquid and have large volumes of gas trade. Hence, internal gas market became part of the Union's "foreign policy" when one of the tasks of the External Action Service in cooperation with DG Energy is to find alternative suppliers that might fill the gas pool. The EU officials put a lot of hope in the coming LNG oversupply that shall promote diversification and market competition (interview with officials from EEAS and DG Energy). But diversification in this case means additional supplies which shall fill European hubs. This LNG oversupply should happen during the expiration period of the long terms

transmission contracts and Gazprom would come under the pressure to change its LTSCs as well.

Conclusion

For decades gas relationship between the Soviet Union/Russia and the Western European countries was quite stable and the issue of "energy security" did not arise. This situation became to change with the development of the gas market in the Western Europe. The new economic base required new regulations. Market integration means that these regulations shall have a Community/Union scope and be in the hands of the supranational bureaucrats and other regulatory bodies that are under the control of the Commission. Yet market development proceeds unequally and there are significant disparities both between various MSs and between the EU and Russia.

The Commission in order to achieve market integration and redistribution of gains in the EU favour is trying to enhance its regulatory space along the supply chain (to control the source of its dependence). In order to be successful it had to achieve horizontal legal integration first. Since market development is unequal, this cannot bring optimal results for all parties. Yet waiting until the market conditions are met even in the most "backward" (from the market perspective) Member States would equals to give a *carte blanche* to Gazprom to pursue its vertical integration that could forestall any future regulatory reforms.

This perfectly reflects the four sources of geo-economic conflict: (1) distributional conflict; (2) conflict over interdependence; (3) unfavourable shadow of the future; and (4) regulatory conflict. Unequal gas market evolution raises questions about the distribution of gains and costs of economic cooperation. The perspective of these changes forces the relevant actors to act proactively in order to create its "own" regulatory regime that would lock-in distribution of gains for the future. Obviously, the best way how to achieve this is to expand its regulatory regime along the whole supply chain – the form of vertical and horizontal integration (whether legal/regulatory or directly proprietary). This creates "energy security dilemma": as both parties pursue the same policy the end result is vertical disintegration.

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Keyword set

Gas, Energy Security, Energy Policy