

# Turning Pipe Dreams into Pipelines

## Eurasian Energy Transit and the Credible Commitment Problem

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*Adam N. Stulberg*

*Georgia Institute of Technology*

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Russia's 2009 gas cutoff to Ukraine and the European Union and subsequent efforts to establish control over the Caspian Pipeline Consortium (CPC) reignited concerns about a "re-energized" Russian foreign policy across Eurasia. Similarly, the July 2009 intergovernmental agreement on the construction of the Nabucco gas pipeline, a project mired in controversy over sources of throughput and financing, continues to fuel anxiety in Moscow over the "politicization" of Caspian energy exports. The clamor surrounding these episodes is symptomatic of a broader debate on the strategic dimensions of cross-border Eurasian energy transit, in which pipelines are viewed as either instruments of competitive resource nationalism or conduits for strengthening interdependence and regional cooperation. This, in turn, betrays the conventional wisdom that politics and geostrategic posturing trump the economics of pipelines, making the countries between Russian/Caspian suppliers and European/Asian markets mere pawns in the global quest for energy security.

Upon closer inspection, there is both more and less conflict surrounding Eurasian energy transit than is commonly presumed. On the one hand, the small transit states of post-Soviet Eurasia exert considerably more influence over volumes and terms associated with the construction and operation of Eurasian pipelines than might be assumed on the basis of relative power or supplier-customer dependency relationships. Moscow's mixed success in coercing favorable terms for tariffs, pricing, off-take, and debt-equity stakes, or in leveling political retribution at Ukraine and Belarus, are

especially illuminating in this regard. On the other hand, there are fewer problems with opportunism and arbitrary disruption than the structure of pipeline economics and pure cost-benefit analysis would suggest. In this case, the continued operation of oil (CPC) and gas (Blue Stream) pipelines involving Russia, as well as the Baku-Tbilisi-Ceyhan (BTC) oil pipeline, stand out.

This variable record highlights important conditions and practical lessons for advancing and sustaining future cross-border operations among suppliers and transit states in Eurasia and their downstream extra-regional partners. Accordingly, U.S. policymakers interested in alternative Eurasian transit deals would be best served by jettisoning simplistic notions of pipeline politics premised on either circumventing or engaging specific regional states. Instead, they should focus on “getting energy to market” by redressing strategic bargaining factors, which accentuate conflicts of interest and values associated with respective projects.

## **The Geo-Economics of Eurasian Pipelines**

Oil and gas export pipelines constitute physical-commercial ventures subject to economies of scale, long-life cycles, large upfront investment, inflexibility, natural monopolies, and the tyranny of distance (especially for gas). As a fixed infrastructure prone to market failure, the value of a pipeline is directly affected by the dedicated upstream supply, price of throughput, and state intervention. As well, both the construction and operation of export pipelines are fraught with structural challenges, as they involve multiple international stakeholders (suppliers of throughput, owners of pipelines, host transit governments, and importers) who are left to their own devices in resolving natural conflicts of interest, reconciling different national legal regimes, and locating mutually rewarding beneficial outcomes for the reliable delivery of valuable throughput.

These underlying problems are compounded by the fact that owners of cross-border pipelines are not always the owners of the throughput, and variable costs of operation tend to pale in comparison to the huge sunk costs of construction. Accordingly, there are economic incentives for delivery that covers operating costs to continue, even if losses are incurred and initial investment is not recouped. This creates bargaining disparities, as the mobility and profitability of investment that initially empowers pipeline owners becomes a liability due to the long amortization of fixed pipelines and increasing energy prices; over time, the latter encourages transit states to hold resources hostage and renegotiate for more favorable terms for tariffs and off-take. However, the obsolescence of original contracts and the shift in bargaining leverage toward transit states can be mitigated under certain conditions: when the latter are more concerned about their international reputation, face competition from rival pipelines for the same throughput, and rely on the off-take to meet significant domestic needs. Given that post-Soviet transit states are not immune to these conditions, the conflict-prone structure of Eurasian cross-border energy transit is neither unique nor intrinsically unmanageable.

What distinguishes contemporary cross-border energy transit in Eurasia, however, is that its economic fundamentals are significantly muddled by the Soviet legacy. Since

much of the existing regional pipeline infrastructure was built under the defunct Soviet regime, none of today's stakeholders sunk hefty costs into construction. For legacy pipelines, therefore, there is little concern about realizing returns on investment. Instead, there are incentives to bargain for better terms, as the involved parties (excluding downstream customers) risk incurring only opportunity costs and marginal costs of operation by disrupting delivery. This not only confounds the pure economics of post-construction behavior, but obfuscates relative bargaining power between Russian suppliers, foreign operators, and transit governments.

The proliferation of transitional governments across Eurasia adds another wrinkle. Notwithstanding national differences, Russian and neighboring regimes generally share troublesome characteristics related to weak institutional capacity; market concentration; insider- and patronage-based decisionmaking; blurred ownership and control over national infrastructure; and the fusion of political and economic, as well as public and private, interests. Such chronic and widespread problems of institutional opacity create information asymmetries surrounding preferred costs, tariffs, and revenue streams from respective pipelines. Ironically, this places greater reliance on contract *stability* (rather than rule of law) as an indicator of credible commitments, while increasing legal and regulatory risk and generating parochial incentives to renege on original terms for operating respective pipelines. Economic motives and signals that would otherwise govern strategic interaction for cross-border transit fall short amid transitional institutions of Eurasia that are too frail and nontransparent to alleviate anxieties or resist impulses to arbitrarily renegotiate for more favorable terms.

The bargaining context surrounding Eurasian pipeline operations is affected not only by the pure economics of cross-border transit, but by broader strategic problems of extending credible commitments. The institutional uncertainty, information asymmetry, and range of evolving and conflicting interests can drown out the mutual benefits of smooth operations and make it especially hard for all parties to resist opportunities to renege on cross-border transit deals. Furthermore, commercial incentives for managing energy export relations are confounded by asymmetries in the relative economic and political value Eurasian governments assign to specific transit options, their overarching risk-taking propensities, and their institutional capacities. Together these economic and political factors shape relative bargaining leverage that, depending upon the specific combination, increase or decrease the likelihood of successful operation of "old" and "new" Eurasian pipeline projects.

## **Lessons from Events and "Non-Events"**

The record of Eurasian pipeline politics has been mixed. There have been dramatic episodes of gas and oil cutoffs orchestrated by suppliers, most notably Russia. Similarly, transit states, such as Ukraine and Belarus, have instigated and prolonged showdowns by abruptly revising terms for tariffs and off-take at the expense of Russian suppliers and European customers. At the same time, though less highly publicized, several potential cross-border transit crises have been averted. These events and "non-events" illustrate not that specific states are to blame for disrupting Eurasian energy transit, but rather that bargaining credibility and power turn on the balance of key economic and political conditions.

### **Russian-Ukrainian Gas Cut-Offs, 2006 versus 2009**

The most conspicuous episodes of Eurasian pipeline politics have involved repeated gas showdowns between Russia and Ukraine. These are the only cases in which significant supplies to downstream European markets were disrupted. Russia shoulders considerable blame for these actions, especially in 2006, when it precipitously raised the price, altered the terms for Ukraine's off-take and the role of intermediaries, and subsequently diminished the volume of supply to compel compliance. At the same time, both cutoffs were costly to Russia monetarily and in terms of its reputation, and they resulted from very different bargaining conditions. In 2006, Russia's Gazprom was well motivated and positioned to blackmail Kyiv, given both rising European and Central Asian gas prices that significantly raised the costs of subsidies and non-payments and its success at foreclosing independent deliveries from Turkmenistan. Meanwhile, the newly established Ukrainian leadership was consumed with consolidating domestic power and gradually diversifying energy supply relations. Notwithstanding this leverage, Moscow's concerns about preserving the security of deliveries to lucrative and nervous European markets, along with its reputation as a reliable supplier, rendered it especially sensitive to even marginal knock-on effects of Ukrainian diversions of throughput. This constellation of factors encouraged opportunism, but tempered Russia's ability to resolve the price issue, dictate transit fees, or impose political demands on Kyiv.

The situation in 2009 was quite different. Moscow's bargaining position deteriorated appreciably as it was locked into paying for expensive Central Asian supplies while world prices, domestic production, and downstream European demand were falling. Any disruption of delivery was financially painful (a loss of \$100 million per day) and, in the wake of the European outcry from 2006, especially damaging to Russia's claim to be a reliable supplier. Russia was impotent to extract supply and transit prices from Kyiv that would be significantly more favorable than those it had achieved months before punitively turning off the spigot. At the same time, Ukraine was in a better position to hold Russia's cross-border exports hostage, as Gazprom could ill-afford to default on accumulated debts and because Kyiv had earlier hoarded Russian supplies that it could re-route to domestic customers. With declining consumption and exploration of alternative supply routes in Europe, Kyiv was also motivated to extort the EU for investments to rebuild its pipeline and storage systems; it could raise the specter of disruption with little risk of fundamentally alienating Europe. Moreover, Ukrainian politicians became increasingly risk-prone in the face of heated political crises, a sinking economy, and deteriorating terms of trade. The linkage of Russian intermediaries to "dark forces" within Ukrainian political and energy circles compounded problems of clearly conveying preferences and establishing responsibility for collecting and paying energy debts. Amid this convoluted landscape, none of the parties involved could extend credible commitments to sustain mutually acceptable deliveries or avert significant costs with disruption.

### **Druzhba Oil Showdown, 2007**

Moscow's brief shutoff of crude oil deliveries to Europe via Belarus in 2007 also resulted from mutual frustration and a yawning bargaining gap. Moscow's tolerance for subsidizing imports waned as international oil prices rose, the construction of the

competing second line of Russia's Baltic Pipeline System was proposed, and fatigue with Minsk's failure to institute reforms for the planned state union or preferential access for Russian firms took hold. Russia's pipeline monopoly enjoyed considerable room to impose higher export duties, as downstream European customers had alternative suppliers and maintained a two-month strategic reserve to cushion the blow of a short-term disruption. There were also strong incentives to reset post-Soviet oil relations, especially after rows with Azerbaijan, Georgia, and Ukraine, as well as an earlier success in doubling gas prices and wresting 50 percent control over Belarus' domestic gas pipelines. By contrast, Minsk had only one week's worth of reserves and could not turn to alternative suppliers or allies. Moreover, Belarus depended on the off-take to meet domestic consumption and earned over \$2 billion from the processing and re-export of cheap Russian oil. As Moscow ratcheted up demands, however, it effectively overplayed its hand, presenting Minsk with seemingly dire domestic economic consequences and the near certain loss of its treasured "economic sovereignty." This, in turn, increased the appeal to Belarus of the risks associated with stealing oil and blackmailing Russia.

### **"Dogs That Haven't Barked"**

In contrast to the above, pipelines constructed after the fall of the Soviet Union have experienced far fewer arbitrary disruptions. Notwithstanding the nuisance of occasional physical attacks on the pipeline, the BTC pipeline delivering Azerbaijani crude to European markets via Georgia and Turkey has been insulated from discretionary renegotiation. A number of factors augured well for the costly pipeline to be built (including a committed private champion, convergent political interests of states along its route, and third party support). However, the stakes for maintaining smooth operations have been especially high for Georgia, which receives transit revenues with delivery of total throughput, depends on Azerbaijan for critical supplies of gas and oil, and stands to benefit from a potentially expanding network of Caspian cross-border pipelines. With prospects for landing future transit deals and upgrading oil export terminals, even a strident Georgian leadership has little to gain from extorting the operators. Furthermore, the dispute resolution mechanism that has been agreed upon empowers the United States as referee, strengthening an international commitment to the success of the venture.

Similarly, there are success stories involving Russian participation. The CPC project, the only pipeline in Russia not wholly owned by the state transit monopoly Transneft, has kept Kazakh oil flowing to Europe and remains on track to expand by 2013. Moscow's threats to raise taxes and transit fees, overhaul terms of payment and financing, restructure the consortium's management, and hold up the planned expansion in order to acquire a controlling stake all proved hollow. Critical to the CPC's ongoing success have been a stipulated, phased expansion; the designation of oil suppliers, including Russia's Lukoil, as full joint partners in CPC; options for transiting Russian oil in an expanded pipeline; and agreement by all parties – including private companies and the Russian and Kazakh governments – to international arbitration on equal terms. Viable options for delivering Kazakh crude via BTC or to China, as well as ongoing rivalry between conflicted Russian oil firms and Transneft, also attenuate threats of resource nationalism and inflate the opportunity costs of blocking CPC's

expansion.

By the same token, Russia has reliably delivered gas to Turkey for re-export to European and Middle Eastern markets. Although initial negotiations were marred by informal dealings, this gas trade has become increasingly transparent. The Blue Stream project, in particular, has benefited from Ankara's status as the largest single consumer of Russian gas and Turkey's expanding visions of becoming a global transit hub. In conjunction with lobbying by Moscow, European officials, and private investors for separate follow-on projects and bilateral deals, these factors have effectively raised the stakes for continuing smooth operations.

## Recommendations

As U.S. officials consider future policy towards alternative Eurasian pipelines, they should be aware of the economic and political conditions that affect the balance of interests and credibility associated with respective ventures. Although specifics vary across projects, several guiding principles stand out.

*Not all Eurasian pipelines are created equal.* Because of the peculiarities associated with Soviet legacy pipelines and the huge start-up investment costs of new fixed transit routes, the costs of arbitrary disruption to future ventures will likely be greater for all parties involved than showdowns over inherited pipelines suggest. Statesmen should avoid basing the pursuit of future ventures on the drama of recent Russian-Ukrainian showdowns.

*Diversification trumps specific pipelines.* The mixed bag of energy export reveals not only that state intervention is a must, but that all governments in Eurasia (including Russia) can play both constructive and disruptive roles in cross-border transit. The advantages of competition in containing opportunism should not be sacrificed either in favor of specific projects or to isolate specific states. Rather, U.S. policymakers should promote general "directions" for diversifying Eurasian energy transit (like a "Southern Corridor") and for mediating future disputes, leaving it to the parties involved to determine the selection, cost effectiveness, and contract terms for specific ventures.

*Reassurance is critical to "multi-partner" diplomacy.* Risk-prone Eurasian leaderships must be reassured, rather than driven, to take costly gambles on arbitrary disruption. Consequently, U.S. and European "multi-partner" diplomacy should be aimed at either attenuating the risks or increasing the upside of smooth operations of alternative pipeline projects. This could include tying future investment in transit-state energy infrastructure and in phased pipeline extension and development projects to successful delivery of throughput.

*Promote institutional transparency.* Relative bargaining power matters because the risks, credibility, and capacity engendered by opaque domestic regulatory regimes in Eurasia are so weak. This places added pressure on clearly specifying contract terms and responsibilities, fusing the stakes of suppliers and transit states in cross-border pipeline ownership, and actively engaging in conflict resolution procedures. Over time, greater transparency in domestic legal and oversight mechanisms is a must. This will be key in sustaining self-enforcing transit agreements, and to exposing hostile intentions.

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