

Geo-economics: natural gas and Russia's strategic adjustment under unipolarity

Boris Barkanov, West Virginia University

Introduction

This chapter utilizes realist political economic theory to make sense of Russian natural gas policy (henceforth policy). The contribution is to clarify the relationship between economics and politics in Russian policy by situating it within the broader historical and theoretical question of Russia's strategic adjustment to unipolarity. This facilitates an alternative interpretation of the 2006 and 2009 Russo-Ukrainian gas wars to the academically and politically influential geopolitical "weapon" view.

The argument is threefold. First, policy is best understood as reflecting a stage in Moscow's strategic adjustment to unipolarity that emerged at the turn of the 20th century, and focused on geo-economics, the use of state power to craft international markets. Second, policy specifics originated in the business strategy of Russia's dominant gas company, *Gazprom*, which was consistent with the state's general goal of shaping markets to promote Russian economic integration on favorable terms. Third, this strategy saw mixed success depending on the character of strategic interactions. When the latter soured due to Russia's partners' policies, Moscow reacted by prioritizing position and control over profits, which is consistent with a geo-economic strategy. This empowered Euro-Atlantic hawks whose securitizing moves (Wæver 1995; Buzan, Wæver, and de Wilde 1998) layered geopolitical dynamics over relations with the EU, which had its own geo-economic agenda to create competitive markets. In this sense, the strategy backfired. The 2014 Maidan revolution, Russia's unrecognized annexation of Crimea and the Donbass war (henceforth, the Ukrainian crisis) marked the failure of geo-economics in Ukraine and seriously disrupted energy and broader political relations with the EU, as geopolitical tendencies became more pronounced.

The argument is applied to post-2000 policy toward Germany and Ukraine. Gas merits our attention because Russia's relative power – based on proportion of world reserves, production, and imports into Europe – is particularly prominent. This power advantage implies that policy drivers, whatever they may be, should find maximal expression in this sector. These intrinsically important cases present full spectrum outcome variation: success (Germany) and failure (Ukraine). Ukraine also displays across-time variation.

The discussion begins by examining the literature on Russian energy policy from a realist political economic perspective to highlight gaps in our knowledge concerning the relationship between power, wealth and state strategy under unipolarity. After describing Russia's and

Gazprom's strategies, the analysis turns to the empirical cases. To fill out the picture globally, Russia's "pivot to China" is also examined.

The conclusion summarizes the role of gas in Russian strategy and the reasons for its variable success.

Weapon or what?

The role of energy in Russian foreign policy is an emotive issue. Despite general agreement that energy is central to Russian foreign policy, Moscow is a consequential energy actor particularly relative to Europe, and Russian energy relations see some admixture of profit-seeking and power politics (Stent, Angela 2008, 78–79), research is mired in controversy.

An important axis of debate concerns how energy policy relates to high politics. Reminiscent of Hirschman's (1980) famous study of Hitler's economic strategy in southeastern Europe, the voluminous energy "weapon" literature (Smith 2004; 2008; Baran 2007; Goldman 2008; Orbán 2008; Umbach 2010; Blank 2011; Lucas 2014; Jonsson and Seely 2015) interprets Russian policy as an effort to leverage international economic structural dependencies to enhance its power and influence for geopolitical ends.

Analysis focuses on the discursive constitution of "energy superpower" (Bouzarovski and Bassin 2011), how asymmetrical interdependence affects the security and independence of Russia's energy partners (D'Anieri 1999), and the consequences for EU/NATO cohesion (Blank 2011), American influence (Leverett and Noël 2006; Kubicek 2013), and the global order (Cohen 2009; Bouzarovski and Bassin 2011). The state's prominent policy role and conflicts with neighbors, especially Ukraine, support the inference of power-seeking motives, while energy prices (Nygren 2008; Snegovaya 2015) and balance of power perceptions explain variation (Orbán 2008).

This view is contested by research highlighting positive sum outcomes associated with Moscow's long-term economic priorities (Tsygankov 2006), commercial/economic goals in the energy sphere (Stern 2006b; Abdelal and Mitrova 2013; Aalto et al. 2012), mutual dependence on EU markets (Casier 2011; Olikar and et al. 2009; Closson 2009; Stern, Pirani, and Yafimava 2009, 60), and the difficulties of exercising gas market power (Finon and Locatelli 2008). Some argue that a geopolitical focus obscures more serious political economic dilemmas (Luciani 2006; Noël 2008; Jaffe and Soligo 2008; Milov, Coburn, and Danchenko 2006; Stern 2006a; Stern 2009). Domestic constraints raise doubts about strategy and policy coherence (Legvold 2008; Monaghan 2007; Balmaceda 2013). Others focus on how commercial, institutional, and ideational factors produce behavior and outcome variation (Hancock 2006; Stulberg 2007; 2012; 2015).

A significant body of work suggests Russian policy is reactive (Shadrina 2010, 17; Aalto et al. 2012). EU market liberalization – also "political" – portends major risks (Goldthau 2012; Godzimirski 2013, 153–54; Hulbert and Goldthau 2013) associated with "security of demand"

(Yenikeyeff 2006), relationships in Europe (Abdelal 2015), and Russia's financial well-being, energy security, institutional development, and political culture (Meulen 2009; Feklyunina 2008). The result is a growing EU-Russia "energy security dilemma," (Monaghan 2006; Krickovic 2015), partly the result of EU hawks' attempts to securitize energy, disrupting decades-long successful cooperation (McGowan 2011; Raszewski 2012).

These correctives to the "weapon" perspective are insightful from a business, political economic, and IR perspective. However, they reproduce the politics-economics dichotomy or do not explicitly theorize this conceptually complicated relationship. Moreover, research neglects how a key systemic factor – a unipolar distribution of power – has influenced Russia's strategic posture and policy.

This work differs from previous research by examining these lacunae directly. Realism highlights two systemic factors – anarchy and the distribution of power – that are central to understanding world politics and political economy. Second, it allows a more sophisticated, historically sensitive approach to the relationship between power and wealth. Three interrelated questions structure the analysis: How do power and plenty relate under anarchy? What are the macro-incentives associated with unipolarity? Under contemporary unipolarity, are state strategies likely to be primarily geopolitical (the subordination of economic goals to high politics) or geo-economic (the use of state power to advance economic goals)?¹

For realists, separating politics from economics is an artifact of liberal thinking. Politics and energy are inextricably linked (Shaffer 2009, 1), as are power and plenty generally (Viner 1948). World politics influences international economic relations due to anarchy, while economic prowess is essential to long-term power (Grieco 1990; Kirshner 1999). Economic resources can yield security and political dividends (Hirschman 1980). However, politics shapes economics too. States create domestic markets (Heckscher 1934; Polanyi 1944), a process shaped by anarchical danger (Snyder 1990; Gerschenkron 1962), while the most powerful states – hegemons – create international economic orders (Kindleberger 1973; Gilpin 1981; Ruggie 1983)

The economics-politics relationship varies historically. During the Cold War, pursuing wealth followed the high politics of bipolarity (Luttwak 1990; Gowa 1994). Hegemonic realists emphasize that unipolarity – the overwhelming and unambiguous concentration of power in a single state – creates different incentives (Wohlforth 2009). The unipole's power advantages render geopolitical competition futile and risky.

Unipolarity dampens geopolitical competition but the incentives for geo-economic strategies are ambiguous. States are likely to focus on long-term economic development to meet domestic expectations or eventually catch up. Ruthless inter-state competition for a bigger, better piece of the pie supports geo-economic strategies – states' leveraging power for wealth

¹ This distinction is consistent with Luttwak but the focus is on the relationship between politics and economics. (Luttwak 1990)

– and the emergence of status/positional concerns (Schweller 1999). However, secondary states have to be careful that geo-economic competition, especially with the unipole, its allies, and states courting them stays within bounds; there is a fine line between competing and provoking unipolar animus (Wohlforth 2003).

To summarize, under unipolarity, geopolitical strategies are unlikely to survive (hypothesis 1). Economics will be prioritized however, state power is deployed to shape markets in self-regarding ways (hypothesis 2). Competitive interactions make positional goals salient (hypothesis 3).

Energy in Russian foreign policy

Geopolitics to geo-economics

As hegemonic realists predict, by 2000 Moscow recognized the futility of geopolitical competition. Strategic adjustment reflected an explicit repudiation of a misguided policy that wasted limited resources. This was not just a rhetorical shift, but informed important changes in strategic thinking and policy (SVOP 2000; Tsygankov 2013; Pouliot 2010; Larson and Shevchenko 2010).

The new strategy reflected the ‘economisation’ of Russian foreign policy (Pirani, Simon 2009a, 8–9) to promote economic growth and modernization (Tsygankov 2006). This meant supporting Russian business to increase revenues, advance integration through deepening commercial relations, and to find a niche in a competitive, globalizing economic (SVOP 2000). In the post-Soviet space, gas became the main integration vehicle (Mitrova 2014). This contrasted with Primakov’s unsuccessful mobilization of Russian business for geopolitical goals (Tsygankov 2013; Stulberg 2007).

Moscow did not reject the power-laden view of international relations that became dominant under Yeltsin (Mlechin 2007). It saw the international economy as a ruthless competition between state-supported firms. As Putin remarked, “...nobody is going to especially help us...We must fight...for a place under the economic sun”(Putin 2002). Russia would continue Yeltsin’s integration project to support growth, modernization, and become a “normal great power” (Tsygankov 2005). However, Russia would be not a passive economic object of neo-liberal engineering promoted by Western powers, but a purposive subject attuned to its own needs and striving to shape the terms of its integration advantageously. This meant developing a coherent foreign policy that leveraged commercial and political resources to Russia’s economic benefit. Geo-economics was a multi-sectoral strategy, but natural resources and infrastructure acquired “strategic” importance because they comprised Russia’s competitive advantage (Grigoriev and Chaplygina 2003).

Considered a legitimate project for a state aspiring to an influential role internationally, geo-economics was mimicking Western powers which routinely work with firms (Yergin 1991; Krasner 1978; Mitchell 1991) and play hardball. Yeltsin’s Russia experienced firsthand Western

use of financial aid in the 1990s to shape Russian policy, including energy. The Baku-Tbilisi-Ceyhan pipeline, dubious commercially, became reality with American support, breaking Russia's Caspian oil export monopoly.

The leadership did not necessarily have a scientific understanding of western states IPE policy; these were schemata that informed Russian understandings of appropriate behavior. This makes legible Putin's refrain, that "When we fight for our interests, we look for the most acceptable methods....We see how the United States defends its interests...what methods...they use..." (Nabi Abdullaev 2006).

This was Moscow's understanding of economic cooperation in a competitive world. Russia assumed leadership by creating markets and this was appropriate behavior even if it ruffled feathers. Thus, Presidential aide Igor Shuvalov claimed that:

"...We are telling Europe: you are leading on some things. But we have raised the bar of leadership in a different area...at a substantial risk...but successfully so far. We have already become involved in conflicts, we are making progress...we know how to act in the future."(*Nezavisimaya Gazeta* 2006)

Gazprom's strategy

Rebuilding its domestic influence, the state coopted *Gazprom*, whose pre-existing strategy oriented geo-economics in the gas sector. Three components stand out. First, *Gazprom* wanted to grow its European business by penetrating downstream. Forced to sell to national monopolies "at the border" during the Cold War, the exporter sought to enter the distribution/retail segments where margins were thought to be higher (Vavilov and Trofimov 2016a, 85; Stern 2005, 111). Eventually, it proposed swapping upstream for downstream assets, or "asset swaps."

Second, *Gazprom* was interested in acquiring some ownership control in midstream pipelines. Ownership minimizes transportation costs (Vavilov and Trofimov 2016b, 113). Controlling market access conditions would interest any large supplier. This had special significance for *Gazprom* since transport pipelines had been coterminous with the Soviet state. With the collapse, *Gazprom* became dependent on Ukraine's transit monopoly to Europe, prompting Russia to seek ownership control over Kyiv's gas transport system (GTS) (D'Anieri 1999, 81; Pirani 2007, 20) and build bypass pipelines (ie...Yamal-Europe through Belarus and Poland).

Pipeline policy also aimed to protect markets. *Gazprom* argued that American efforts to bring Central Asian gas to Turkey and Europe through bypass pipelines (ie...Trans-Caspian pipeline) harmed its business (*Petroleum Report (Interfax)* 1999). Europe's subsequent *Nabucco* project exacerbated these worries. Additional pipelines bring incremental supply, lowering prices. As pipelines are expensive, this creates a first-mover advantage. By accelerating its own projects (Blue Stream/Turkey; South Stream/southeast Europe), *Gazprom* rendered competing routes

financially unattractive. It also signed long-term contracts with Central Asian exporters, locking-in volumes consumers hoped would be supply alternatives (Barkanov 2014).

Third, *Gazprom* valorized business relationships. Personal relations are important for business everywhere, and relationship-based practices are especially resonant in Russian political culture. One-on-one deals also allow *Gazprom* to leverage its size.

In practice, *Gazprom's* strategy boiled down to protecting and growing its market through vertical integration from gas deposit to final consumer based on business-to-business ties. The major change concerned the state's strategic shift to geo-economics. Previously, the state helped *Gazprom* when necessary. Under Putin, *Gazprom's* business became a vehicle for promoting the state's top strategic priority: using statecraft to influence the terms of Russia's international economic integration and most immediately to structure the Eurasian gas market to the advantage of Russia's largest firm.

Mixed results

Europe

Gazprom first entered the German market in the 1990s (Stern 2005). With Chancellor Merkel and President Putin's blessing, *Gazprom* made several "win-win" deals. Between 2007-9, Germany's chemical conglomerate *BASF* and *E.ON Ruhrgas AG (E.ON)* each acquired minority stakes – roughly 25% - in *Severneftegazprom*, a *Gazprom* subsidiary holding the license to the *Yuzhno-Russkoye* field in Yamal-Nenets Autonomous Okrug ("Yuzhno-Russkoye," n.d.). The firms could add a portion of the field's gas to their reserve balance, an important metric for investors (Tomberg 2007). Earlier, *E.ON Ruhrgas* had acquired a majority stake (69.34%) in the OGK-4 power company, making it vertically integrated in Russia ("Acquisition of Majority Stake in OGK-4 Signed and Sealed - E.ON SE" 2007). Despite diverging from the EU's preferred modus operandi, upstream investment was possible for western investors.

In exchange, *Gazprom's* share in *BASF* grand-daughter *Wingas GmbH*, a gas trading, distribution, transit, and storage company, went from 35% to roughly 50%. *Gazprom* purchased a 49% stake in two Libyan oil concessions owned by *BASF* daughter *Wintershall Holding AG*. Later it invested in *Wintershall's* North Sea fields. From *E.ON*, the company received a 49% share in the financial asset *ZAO Gerosgaz* ("Yuzhno-Russkoye," n.d.).

In 2011, a multinational consortium of *Gazprom*, *Wintershall* and *E.ON, N.V. Nederlandse Gasunie* (Netherlands) and *GDF SUEZ SA* (France) ("Who We Are," n.d.) completed the Nord Stream pipeline transporting gas under the Baltic Sea directly to Germany. With these "asset swaps," *Gazprom* became vertically integrated from well-head to consumer.

Nord Stream was justified by expected demand growth and lower transportation costs due to shorter distance and the absence of transit payments. The pipeline has significant

consequences (Abdelal 2015, 565) including eliminated transit risk due to Russia's relations with Ukraine, Belarus, and Poland, whose leverage it reduces. Not surprisingly, Polish Foreign Minister Radek Sikorski called it the new Ribbentrop-Molotov pact (Kramer 2009).

Recent European developments

Conflict with the EU's geo-economic agenda to create competitive markets and geopolitics have upset Russo-European relations. *Gazprom* is negotiating to settle a contentious anti-trust case opened by DG Competition in 2012 (Golubkova and Chee 2016). American shale gas, liquid natural gas (LNG), and growing EU regional spot markets challenge its long-term contract based business model (Stern and Rogers 2014).

With major state support, *Gazprom* successfully negotiated the South Stream pipeline project under the Black Sea, advancing vertical integration in southeastern/central Europe. By 2010, Russia had signed intergovernmental agreements with Bulgaria, Serbia, Hungary, Greece, Slovenia, Croatia, and Austria. Construction started in December 2012. Unlike Nord Stream, a TEN-E priority project with limited exemptions from competition directives, South Stream was at odds with EU legislation and the EC ("Russia Says South Stream Project Is Over" 2014).

The Ukrainian crisis complicated *Gazprom's* strategy by freezing EU-Russia gas relations. EU pressure made Bulgaria shelve South Stream (Stern et al. 2015, 4) In response, *Gazprom* negotiated an alternative route with Turkey that was canceled after Turkey shot down a Syria-destined Russian bomber crossing its borders. Ankara's subsequent apology allowed intensified pipeline negotiations to resume (Makhneva 2016).

Gazprom is also negotiating Russo-German capacity expansion: Nord Stream II. A shareholders' agreement was signed at the 2015 Vladivostok Economic Forum, where *Gazprom* and Wintershall concluded another asset swap (Socor, Vladimir 2015). EU geo-economic (implications for competition) and geopolitical (lost revenues/leverage for Ukraine) concerns make the expansion controversial. *Gazprom's* access to OPAL, the German on-shore extension which it owns with Wintershall, is also in question (Beckman 2016; *Platts News* 2016)

After South Stream's cancellation, *Gazprom* announced that it no longer sought downstream assets, provoking speculation about a changed European strategy (Stern et al. 2015). Recent German developments suggest the shift may be geographically limited. However, the broader context is troublesome. In May 2014, Russia concluded a major Chinese gas deal (discussed below), while Europe's largest economies met in Rome to reduce Russian gas dependence. Post-Maidan Russo-European relations were in deep crisis. Energy strategic cooperation, previously a dominant theme, may be over.

Russo-Ukrainian gas wars

The orthodox view - that Russia's 2005-6 price increases were a geopolitical reaction to punish the Orange government - is problematic. It ignores broader pricing trends toward Ukraine, (Pirani, Simon 2009b, 93) within the CIS (Pirani, Stern, and Yafimava 2010, 6), including a price

war with Belarus (Stern 2006b, 11), and domestically (Mitrova 2009, 25), which predicted an eventual price increase (Abdelal 2013). It neglects Ukraine's transit policy, a key sub-sectoral factor that precipitated conflict (Stern 2006b, 6). Misperceiving its power, Ukraine leveraged its transit near-monopoly to conduct "brinkmanship" to extract better terms of trade, betting correctly that Moscow would be blamed, damaging its reliable supplier reputation. Ukraine's dictating terms raised positional concerns in Moscow, which did not blink (Shaffer 2009, 44).²

The crisis had been "brewing" throughout 2005. Under Kuchma, Ukrainian domestic opposition and commercial disagreements slowed cooperation. However, supply/transit terms were successfully negotiated, obviating crisis. Upon assuming power, the Yushchenko government unilaterally modified a GTS consortium agreement which later collapsed. The pre-existing deal was disrupted after *Naftogaz*' raising transit tariffs invited *Gazprom* to reopen the gas pricing question, access to Ukrainian gas storage came into question, and Prime Minister Tymoshenko "waged an aggressive campaign" against the transit intermediary *Rosukrenergo*, in which *Gazprom* was a partner. Facing Ukrainian intransigence, Russia escalated while offering off-ramps on its own terms, but Kyiv feared "becoming permanently ensnared in *Gazprom*'s ambitions." With no contract on January 1, *Gazprom* stopped Ukrainian supplies while continuing to ship European gas (Stern 2006b; Pirani 2007; Malygina 2014; Abdelal 2013; Hadfield, Amelia 2012; O'Sullivan 2013; Vavilov and Trofimov 2016a; Pirani, Simon 2009b).

Earlier, Ukraine had threatened to siphon transit gas for its own use (*BBC Monitoring Service* 2005). European shortfalls suggested it was following through. After a day of shortages, *Gazprom* increased volumes to protect its reputation. The January 4 agreement was a complicated compromise that, favored Russia, including *Gazprom*'s downstream advance (Stern, Pirani, and Yafimava 2009).

Close examination of 2006-2008 indicates that the 2009 gas war resulted from similar disagreements exacerbated by Ukrainian elite conflict over who would partner with *Gazprom* to extract rents through intermediary firms on the Ukrainian market. With Tymoshenko's April 2007 return as prime minister, state-owned companies, including *Naftogaz*, voided sales contracts with *UkrGas-Energo*, jeopardizing earlier agreements. February 2008 saw a new Putin-Yushchenko deal, but faltering negotiations led *Gazprom* to reduce volumes. Again, *Naftogaz* warned it could not assure European transit without Russian supply guarantees. Another agreement emerged that advanced *Gazprom*'s downstream penetration directly by eliminating intermediaries. In October, a Tymoshenko-Putin memorandum and *Gazprom-Naftogaz* agreement elaborated the deal; notably *Naftogaz* partnered with *Gazprom* in the lucrative European re-export business (Stern, Pirani, and Yafimava 2009; Balmaceda 2009).

Ukraine experienced chronic difficulties paying for gas imports (Abdelal 2013, 433). Relations deteriorated in November when *Naftogaz* failed to settle its debts and rejected *Gazprom*'s proposal for alternative payment (Balmaceda 2009), jeopardizing the previously agreed

² See also: (Abdelal 2013; Abdelal 2015)

contract to be signed at month's end. Again, Russia and *Gazprom* applied pressure. Criticized for not warning customers in 2005, *Gazprom* also sent a delegation to European capitals, including Brussels. Financing was made available to cash-strapped *Naftogaz* which eventually made payment, but late and not including *Gazprom* fines/penalties that it contested. In a December 31st letter, *Naftogaz* CEO Oleg Dubyna threatened that if supplies were cut, transit gas to Europe could be confiscated under Ukrainian law.

Gazprom and Tymoshenko claimed a last-minute compromise was torpedoed when President Yushchenko blocked negotiations. Yushchenko denied this. Former Energy Minister Yuri Boiko blamed Tymoshenko for delaying Ukraine's debt repayment. An unprecedented two-week crisis with major European shortages ensued and the subsequent agreement overwhelmingly favored Russia (Stern, Pirani, and Yafimava 2009; Pirani 2009; Vavilov and Trofimov 2016a).

Recent Developments

Despite improved relations after Yanukovich's 2010 presidential election, negotiations "proceeded cautiously," with "fault lines" keeping relations pragmatic and self-interested. Skeptical about transit reliability, Russia lost interest in Ukraine's GTS, preferring bypass routes. April 2010 witnessed the Kharkiv accords. In an obvious geopolitical linkage, a state-funded gas discount was exchanged for a long-term lease extension for Russia's Black Sea fleet (Pirani, Stern, and Yafimava 2010). In connection with Ukraine's participation in Russia's broader geo-economic project, the Eurasian Economic Community (EEC), *Gazprom* overlooked non-payment and accumulated debt, offering additional price discounts (Stern et al. 2015). Yanukovich's inability to manage pressure from Russia's EEC and the EU's Eastern Partnership provoked the Maidan uprising (Barkanov 2015).

After Crimea's annexation, Russia cancelled the Kharkiv discount. 2014 negotiations were tense but European mediation prevented crisis. Diminished market power from changing southeast European markets also restrained Russia (Stulberg 2015). Already declining with *Gazprom's* exorbitant price, Ukrainian gas demand collapsed due to a deep economic crisis and post-Maidan efforts to reduce gas dependency (Bershidsky 2016). In November 2015, Kyiv suspended purchases (Rapoza 2016). EU-brokered discussions to cover winter shortfalls are underway (*Bloomberg.com* 2016). Nevertheless, Kyiv remains determined to move closer to the EU. Russo-Ukrainian relations are worse than ever, making prospects for gas integration bleak.

Pivot to China

Gas negotiations with China began in the 1990s, intensifying after the 2004 strategic co-operation agreement. In 2006, the Sakhalin-1 consortium (with Rosneft and ExxonMobil) and CNPC concluded an export deal. However, it was blocked by *Gazprom*, whose sales to China would take nearly a decade to agree (Henderson and Mitrova 2016; Henderson 2011).

There are obvious complementarities supporting bilateral trade. Gas can contribute to meeting China's expected long-term demand growth and regional development needs, which it links to political stability. It supports Beijing's ecologically driven "energy revolution." In 2014, relatively cheap and domestically available coal met nearly two-thirds of primary energy demand. But coal exacerbates environmental woes that are becoming socially and politically acute. As American naval superiority facilitates maritime blockades, Russian "onshore" pipeline gas is attractive because of its immunity to potential supply disruptions should conflict between China and the USA emerge.

China's large market offers Russia an alternative to Europe, where *Gazprom* faces stagnating demand, major regulatory challenges, and geopolitical risk. It is the closest major market for otherwise commercially stranded East Siberian gas. Finally, trade promotes state priorities such as developing scarcely populated regions and pivoting to Asia (Henderson and Mitrova 2016; Jaffe et al. 2015; Paik 2015; Chang 2014; Henderson 2011).

Haggling over commercial details hindered agreement. Price – where consumer/producer interests conflict directly – was key. Emphasizing the magnitude of necessary investment, *Gazprom* insisted on European equivalent prices, proposing a methodology linking price to oil or high-priced, Asian LNG gas. Price concessions also create incentives for renegotiations with other partners in Europe and Asia. China suggested a link to coal and later to the domestic market, expecting convergence with world prices. Regulated domestic consumer prices also create a price ceiling. Complicating negotiations further, price depends on financing arrangements, including prepayment, preferential loans, or upstream direct investment (Henderson and Mitrova 2016; Paik 2015; Chang 2014; Henderson 2011).

Another disagreement concerned the pipeline route. Russia prioritized the Altai route, bringing West Siberian gas to Western China, because the Russian segment would be shorter and gas would come from already developed, albeit distant deposits. Because West Siberia supplies Europe, in theory, this would make Russia a "swing producer" able to create competition between the two regions (Chow 2015). Moscow mentioned this in 2006 when EU energy relations became strained after the 2006 gas war. "Swing production" could ensure *Gazprom* against difficulties in Europe, but West Siberia currently has sufficient gas for east and west, blunting *Gazprom's* power (Stern, cited in Paik 2015).

For China, Central Asian (especially Turkmen) imports make Altai less desirable. Unenthusiastic about becoming embroiled in Russo-European disputes, it was also leery of Altai's security of supply and financial consequences. China preferred the Power of Siberia pipeline from East Siberian fields (Chayanda and Kovykta) to China's northern Bohai Bay region. Closer to key markets, it promises cheaper transportation and diversifies routes away from the politically volatile Xinjiang region (Paik 2015; Henderson 2011).

In the context of mutual efforts to create leverage, disagreement over bargaining power prevented a deal. For *Gazprom*, rising demand and expensive alternatives justified a higher

price. Wary of monopsonies, it envisioned connecting the *Power of Siberia* pipeline to the proposed Vladivostok LNG terminal to facilitate entering additional markets, particularly Japan, whose gas demand grew after Fukushima. However, the tremendous transport distance and liquefaction costs made this uneconomical. Russia is also courting India (Henderson and Mitrova 2016; Chow 2015; Henderson 2011).

Meanwhile, China cultivated various alternatives, including pipeline gas from Central Asia and Myanmar, domestic conventional and non-conventional supplies, and LNG from Australia and Indonesia (contracted in the early 2000s). New LNG is expected in the early 2020s particularly from North America (US, Canada), East Africa (Mozambique and Tanzania) and Australia (Henderson and Stern 2014).

Frustrated with *Gazprom's* slow negotiations, the government broke its LNG export monopoly to include YLNG and Rosneft, making possible deals with its domestic competitors. By January 2014, Novatek had sold a 20% stake in Yamal LNG (YLNG) to the China National Petroleum Corporation (CNPC). It subsequently negotiated a 20-year agreement to sell 18% of YLNG's capacity. Later, the Silk Road Fund acquired a 9.9% stake, and together with Chinese banks provided \$13 billion in project financing. Lobbying by Rosneft's President/Chairman Igor Sechin, an ex-deputy prime minister overseeing energy, was instrumental. Rosneft also seeks pipeline exports to China. This rekindled debate over *Gazprom's* dominant gas market position which seemed unassailable a decade earlier (Henderson and Mitrova 2016).

Clearly, domestic pressure was making agreement approximating China's preferences likely. The Ukrainian crisis tipped the scales. High-level meetings, one-third of which included President Putin, spiked in 2014 (Henderson and Mitrova 2016). May 2014 saw *Gazprom* and CNPC finally agree on the *Power of Siberia* project, purportedly worth \$400 billion for gas averaging 38 bcm annually over 30 years. Paik's (2015) price estimate is \$9.9-10.8/mmbtu. Russian officials claimed it approximated Germany's, among the lowest in Europe. Most concluded that *Gazprom's* expectations were disappointed, although apparently both parties could be satisfied at \$10/mmbtu, the Central Asian equivalent (Henderson and Stern 2014). The pricing formula mirrors traditional European contracts. Unlike other Russian firms (eg...Rosneft, Novatek, Sibur), *Gazprom* declined CNPC's request for upstream equity participation and a \$25 billion dollar loan, preferring cheaper state financing and smaller Chinese loans instead. This is consistent with reports that post-sanctions Chinese financing has been "armed robbery" more burdensome than evading sanctions in the EU. Deliveries were expected in 2018-9, but delays up to 2021 – from demand uncertainty and decline in (oil-based) prices – have been reported (Henderson and Mitrova 2016).

Several other projects are emerging. In November 2014, a non-binding, Altai Memo of Understanding adumbrating contractual terms and an implementation schedule was concluded (Henderson and Mitrova 2016). As a second, high volume project, Altai would undermine Central Asian and expensive LNG prices. With competing Russian and American gas "pivots to Asia," Altai was potentially a "significant blow to IOCs" and a "game changer" for Asian gas

markets (Paik 2015). However, low prices have precluded a deal and jeopardized its future (Henderson and Mitrova 2016).

In June 2016, *Gazprom* declined CNPC's "integrated contract" foreseeing joint investment in production, pipeline construction/operation, and exports. This contrasts with its "asset swap" strategy in Europe, where relationships are a source of valuable influence (Abdelal 2015).

In the medium term, Asian gas markets are likely to be very competitive (Henderson and Stern 2014). Unless Chinese shale development stalls or becomes uneconomical (at oil prices below \$50) Russia is unlikely to enjoy long-term political leverage, with optimistic scenarios forecasting a maximum 20% market share (Jaffe et al. 2015).

Russia's Chinese gas strategy has not been consistent. *Gazprom's* extended and unsuccessful bargaining has delayed market entry, ironically catalyzing something it long resisted: consideration of alternative, non-monopolistic market structures at home and abroad. Geopolitics created the final impetus for a deal. Finally, sales to China, though probably less lucrative, would be a financial alternative to Europe pre-empting Russia's economic isolation. Otherwise, achievements have been limited.

Geo-economics and its limitations

What does this tell us about how Russia views natural gas power? *Gazprom's* revenues are very important but appear subordinated to the goal of maintaining position and control when strategic interactions sour. Invited to play chicken by Ukraine, Russia did not back down and even upped the ante by applying pressure, exacerbating conflict. States covet position, reputation, and control and this is consistent with geo-economic motives. These only appear geopolitical if we ignore the role of power in creating markets implicit in the facile economics-politics distinction. One exception is the clear geopolitical linkage in the 2010 Kharkiv agreement. Even here, broader relations emphasized economic cooperation, and the state, not *Gazprom*, picked up the tab.

Second, outcomes depended on the character of strategic interaction. Russia's strategy required bargaining with actors who had competing preferences. Moscow has used the gas trade to both incentivize and compel its partners to do business on its preferred terms. In Germany, conflicts of interests were cooperatively resolved, generating success. In Ukraine, crisis was avoided under Yanukovich (and Kuchma) when competing interests were resolved through compromise agreements that advanced Russia's geo-economic goals.

Meanwhile, Yushenko's aggressive bargaining raised positional concerns, inviting pressure and retaliation, culminating in the 2006 conflict. This was not punishment for geopolitical waywardness, but reflected the inexperienced Orange government's overplaying its hand. When Ukraine agreed to play ball on Russia's terms after losing the 2006 war, conflict was managed as deals that advanced *Gazprom's* downstream advance were crafted. Unfortunately

this was not enough to avoid the 2009 war which erupted despite available win sets due to Ukrainian domestic political struggles.

The results of gas geo-economics have been mixed. The most significant achievement are deepening ties with Western European states and especially Germany, in connection with the Nord Stream project and its potential expansion. Nevertheless, these were exceptional accomplishments that stand out amongst other attempts that were mostly unsuccessful (Vavilov and Trofimov 2016a). After initial success, the strategy failed in Ukraine as Kyiv moved closer to the EU and shut Russia out. Success in China has also been modest.

Russia's strategy was not interpreted as such in the West. Geo-economic goals and the conflict with Ukraine were misinterpreted by western hawks, supporting securitizing moves that transposed relations into the realm of high politics. Geopolitics became increasingly salient making what was essentially a geo-economic conflict between Russia and the EU more onerous. As a result, mutual alienation rather than integration obtained, making the geo-economic strategy more difficult. Germany was exceptional because *Gazprom's* ties to local firms – who narrated developments favorably for the government – pushed in the other direction (Abdelal 2013).

Finally, the Ukrainian crisis has transformed the character of international relations and geopolitical logics are re-emerging. Although Russian domestic politics mattered, a Chinese gas deal was struck because of developments in Europe that made Russia willing to pay a geopolitical premium. Russia's movement toward China became more urgent, and so China's terms prevailed.

This alone does not represent the end of unipolarity, Russian and Chinese “multipolarity” rhetoric notwithstanding. Unipolarity is a global systemic structure constituted by the material balance of power based on relative military and long-term technological/economic capabilities. Whether recent changes constitute a structural transformation in this sense is debatable. The alternative interpretation is that American long-term global power remains unrivaled, but the long-awaited hard balancing has begun. Within-structure processes means unbalanced unipolarity is giving way to balanced unipolarity, which may be more stable.

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