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A comparative analysis on energy subsidies in Soviet and Russian policy

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ABSTRACT

Keywords: Russia Energy Subsidies Trade Eastern Europe Russia's recent intent to use gas supplies to influence the former Soviet Union Republics, and now New Independent States (NIS), has mirrored that of the Soviet's handling of hydrocarbon supplies to the Eastern bloc, or the Council on Mutual Economic Assistance (CMEA). This paper explores the historical and unique conditions in making a comparison of energy trading patterns in the 1970s and 2000s. In the end, by comparing 'then' and 'now', we see a pattern of negative repercussions when the energy card is employed. This study employs a within case study cross-temporal comparative framework and asks: why would Russia transfer a failed policy of subsidies onto its newly independent states?

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As Western allies were debating across the Atlantic over whether to sanction Soviet pipeline projects to Europe, the 37th session of the Council for Mutual Economic Assistance (CMEA) was convening in Berlin. U.S. President Ronald Reagan protested to U.K. Prime Minister Margaret Thatcher over Europe's planned transfer of technology for a new Siberian gas pipeline and expressed his concern about growing European dependency on Soviet hydrocarbons. In 1980, the Soviet Union began negotiations with Western European banks, gas companies, and equipment manufacturers for an East-West pipeline to increase deliveries of natural gas to Western Europe. In a high-profile break with the Reagan administration, Western Europeans in 1982 delivered equipment for the construction of the East-West pipeline despite US protest. While Europeans viewed the project as a source of domestic employment and diversification from oil, the US government was concerned that greater volumes of trade would help to finance the Soviet military arsenal and increase French or German dependency on Soviet gas.

At the same time, the Soviets were coming to a sober assessment of their declining ability to supply the Eastern bloc. In Berlin in October 1983, Premier Nikolai A. Tikhonov reported to his comrades that scope for further energy exports "in many ways depends on the other CMEA countries' ability to provide the products the Soviet Union's economy requires" (The Current Digest of the Soviet Press, 1983; p. 7). The Soviets had long viewed trade within CMEA, the economic arm of the Warsaw Pact, as a means to their own growth and political stability. However, by the mid-1980s they realized that the international socialist relationship as envisioned by Lenin remained unrealized. American concerns as to Soviet dominance through energy supplies to Europe appeared to be overtaken by the realities of an unsustainable arrangement within CMEA.

A similar trans-Atlantic debate re-appeared in the early 2000s as to whether Europe was becoming too dependent on Russian gas and whether this threatened the sovereignty of Central and Eastern European states, comprised of the former CMEA states plus former Soviet republics of Belarus, Estonia, Latvia, Lithuania, Moldova, and Ukraine. American and Polish officials were concerned about planned Russian gas pipelines Nordstream and Southstream to Western Europe crossing the Baltic Sea and bypassing Poland, likening it to a 'gas curtain' similar to the Warsaw Pact's 'iron curtain'. Russia's military incursion into Georgia in August 2008 convinced some that it was to control the energy corridor from the Caspian Sea to

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¹ This organization is also known as The Council on Mutual Economic Assistance or COMECON and existed from 1949 to 1991. Membership included Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania, and USSR. All were also members of Warsaw Pact except Romania.

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Europe. Gas cut-offs to Europe through Ukraine in 2006 and 2009 resulted in calls by U.S. Senators to invoke NATO Article V in the name of preserving energy security. To the contrary, European business partners argued that Russia was a reliable partner and that strengthening business ties in various areas had the potential to affect Russia's modernization.

President Putin's speech at the Munich Security Conference in February 2007 provided evidence for those who believed that Russia was preparing to re-establish its influence over the former Soviet states (Arbatov, 2007; Sakwa, 2008; Simes, 2007; Wallander, 2007). He strongly criticized NATO expansion to the former Soviet bloc and the U.S. for attempting to create a uni-polar world, overstepping bounds in economic, political, and humanitarian spheres. Energy was the one lever over Europe that Russia retained as a counter balance, he maintained. And Russia was prepared to use it, as first pronounced in the September 2003 Russian Energy Strategy and made more vehemently in the National Security Strategy of 2009 (Government of the Russian Federation, 2003, 2009). The 2003 document stated, "Russia possesses great energy resources...which are the basis of economic development and the instrument for carrying out internal and external policy". The 2009 document lists conflict over the struggle for control of energy sources in the Caspian basin, among other places, as a real possibility. Since 2005, President Putin had notified CIS governments that they should soon pay market prices for Russian gas. By 2008, Russia appeared, economically, militarily, and politically to be strengthening its position in the CIS, its 'near abroad.'

However, the global economic crisis and collapse in oil prices exposed Russia's dependence on hydrocarbon sales (Gaddy and Ickes, 2010). In the first two quarters of 2009, the Russian economy contracted 10 percent and the state-owned gas giant Gazprom's earnings declined by over 50 percent. Putin's successor, President Medvedev (2009), called for an end to a hydrocarbon dependent economy and launched an ambitious modernization project. Perhaps Russia had learnt a hard lesson – one that had been practiced since the 1960s: the economy could not be sustained on windfall profits from hydrocarbon sales. What is less clear is whether the Putin/Medvedev tandem learned an even more important Soviet lesson: the use of subsidies is detrimental to long-term growth and does not sustain political allegiances.

Russia's intent to use gas supplies to influence the former Soviet states has mirrored that of the Soviet's handling of hydrocarbon supplies to the Eastern bloc, or the Council on Mutual Economic Assistance (CMEA). The CMEA was the economic arm of the Warsaw Pact's political and military agenda. These two organizations allowed the USSR to exercise influence over the Eastern bloc through inter-party consultations, secret police cooperation, Soviet training of military officers, arms sales, and subsidized energy supplies. The Soviet Union used several methods of subsidizing energy supplies to the CMEA states to, on the one hand, technology and materials to support Soviet development and, on the other hand, to keep the Eastern bloc governments allegiant to them rather than to the West. By 1983, however, the practice of subsidies had negatively impacted on both the Soviet's ability to produce enough hydrocarbons for export, as well as the Eastern bloc's willingness to continue the arrangement. Despite the evident failure of price subsidization, Russia appeared to continue this practice for the successor political organization to the USSR – the Commonwealth of Independent States (CIS) – well into the mid-2000s.

Putin supporters had likened him to Yury Andropov, a former head of the KGB who planned the invasion of Czechoslovakia, and General Secretary of the Communist Party of the Soviet Union in the early 1980s. Like Putin, who succeeded Boris Yeltsin, Andropov inherited the Brezhnev legacy of economic stagnation and corruption. Had Andropov lived beyond his 15 months in office, they believe the Soviet Union would have thrived, resulting from a program of authoritarian modernization, introducing market mechanisms similar to those in today's Communist China. Instead, the Soviet Union collapsed under his successor Mikhail Gorbachev. Putin was meant to be the new Andropov, reviving the Russian economy and international standing with energy as a primary component. However, this article will argue that rather than successfully build on the Andropov experiment, Putin transferred patterns of poor energy management from the CMEA to the former Soviet states. While he claimed to be ridding the trade of subsidies, unofficially it continued. Therefore, this article asks: why has Russia not been more effective over the past four decades in wielding power through its supply of energy? That is, what is it about Russian management of its energy system that does not allow it to employ its full authority over the countries that depend on it for energy? In particular, why would Russia transfer a failed policy of subsidies onto its newly independent states?

Critical to answering these questions is an understanding of the Soviet Union's hydrocarbon sales to the Eastern bloc, all members of the CMEA. The 'energy card' was strongest in the Soviet 1970s and in Putin's Russia from 2000 to the present. Yet, academics have not yet examined the trading practices within the CMEA to see if there are parallels and divergences in Russia's energy trade with the former Soviet states after 1991. This article will argue that in both the 1970s and 2000s, when Russia was reaching peak production and windfall profits were high, Moscow had an opportunity to sustain long-term control over the market. Many of the same strategies were employed, which led to the weakening of the Russian economy and its ability to influence external actors.

Since the 1970s, the Russian economy has been dependent on oil rents, or a 'rentier state' (Mahdavy, 1970). Beblawi and Luciani (1987) used the term 'rentier economy', defined as an economy dominated by rents coming from abroad where the government is the main recipient of these rents. As a result, Russia has displayed signs of a 'paradox of plenty' syndrome (Karl, 1997), in which abundant resources, rather than spur development, have tended to inhibit it. Oil rents have resulted in a disincentive for state leaders to invest in fiscal institutions because it induces myopia and risk aversion (Anderson, 1987; Beblawi and Luciani, 1987; Karl, 1997). Oil has also promoted the insulation of policy-markets and thus a high degree of state autonomy (Ascher, 1999; Karl, 1997; Shafer, 1994). Finally, Russia, like many oil rich states, has tended to become overextended administratively (Auty, 1988) and managing the oil sector has exacerbated the weak bureaucracies and fiscal institutions (Karl, 1997).

This article explores the historical and unique conditions in making the comparison and draws lessons for Russia and the West. In the end, by comparing 'then' and 'now', we see a pattern of negative repercussions when the energy card is

employed. Then, it reinforced the growing socio-political disenfranchisement of Warsaw Pact nations, leading to the disintegration of the Soviet Union. Now, it has hampered sustainable economic growth of Russia and pushed Europe to scramble for alternatives to Russian gas. Then and now price subsidization, poor infrastructure, and lack of investment has inhibited development of Russia's energy sector and, by extension, its ability to manipulate the market. This study employs a within case study cross-temporal comparative framework. The article will first examine the Soviet-CMEA 1970s oil trade. It will then compare this with the 2000s gas trade with the former Soviet states, all members of the CIS. The article will conclude with lessons for Russia's energy management.

The legacy of the 1970s oil era

The USSR had three objectives in energy trade within CMEA: increase specialization and division of labor to develop the Soviet energy sector; strengthen East European economic dependence on the USSR; and, weaken Eastern Europe's ties with the West to promote bloc economic integration (Central Intelligence Agency, 1980a; p.iii). Under the 1971 'Comprehensive Program for the Further Extension and Improvement of Cooperation and the Development of Socialist Economic Integration' three projects were undertaken in the energy field: Druzhba oil pipeline from Kuybishev, USSR to Poland and the GDR; Mir electricity distribution system throughout CMEA; and, the Soyuz natural gas pipeline from Orenberg to the Soviet-Czechoslovak border near Uzhgorod. It was the goal of the USSR in the 1970s to support these projects with technology and materials from the Eastern bloc in exchange for long-term oil and gas supply contracts. Indeed, supplies of crude and crude oil products doubled to the entire Eastern bloc but Romania between 1970 and 1980 (see Fig. 1). Likewise, transit through the Eastern bloc for lucrative sales to Western Europe was critical to this goal and starting in the 1960s a network of pipelines was developed.

Price subsidization played an important role in sustaining the allegiance of the Eastern bloc countries for much of the 1960s and 1970s. The 1958 'Bucharest Formula' established annual price adjustments based on a moving five-year average of world market prices that lasted until 1975. Marrese and Vanous (1983, p. 52) called this an "implicit subsidy" because in general energy and materials were sold to Eastern Europe at below world market prices in exchange for machinery and equipment that was purchased for higher than world market prices. This was essentially a barter system that was tracked through paper trades called transferable rubles (TR). The strange nature of moving averages of prices and the paper trade of goods in exchange for fuel based on transferable rubles meant that intra-CMEA prices never accurately reflected world market prices. The TR was introduced by intra-CMEA trade agreements and simply represented a currency of compensation. It was generally agreed that the dollar exchange rate for the transferable ruble was overvalued and, as a result, products traded between CMEA countries sold on average for more than the dollar price for that product multiplied by the official TR-dollar exchange rate. This was confirmed when the Soviet subsidy to Eastern Europe grew exponentially as a result of the 1973 Arab oil embargo on sales to the West and Japan driving up world market prices. That is, as East European imports were partially compensated for by barter trade with Moscow, they should have delivered a 50-fold increase in goods in exchange for the same volume of oil but did not (Gati, 1990; ch. 4).

However, the Soviet lever on CMEA was not strong enough to rebalance the trade relationship, particularly as they were increasingly unable to meet export targets. In 1980–1981 Soviet oil exports to Eastern Europe for TRs stagnated, and in 1982 they fell significantly when the Soviets announced to selected Eastern European countries (Hungary, Czechoslovakia, East Germany, and Bulgaria) that 10 percent of the oil previously sold for TRs at below world market prices would now be available only for dollars at world prices (Hewett, 1984; p. 152). Compounding this cut in Soviet exports was a drop in world market prices in 1983 just as long-term agreements on favorable pricing of supplementary crude expired with CMEA. Declining prices meant CMEA countries could buy oil on the open market cheaper. However, fuel imports from the Persian Gulf put CMEA countries increasingly in debt. A negative trade balance forced most of the Eastern bloc economies into heavy borrowing from the West. The Bloc countries deteriorated steadily in the 1980s and Poland, Czechoslovakia, and Romania were in particularly difficult situations with increasing political instability. They suffered from rampant inflation in consumer goods, an approaching recession, declining standards of living, and serious shortfalls in production of many raw materials and fuel.

	1970	1975	1976	1977	1978	1979	1980
Bulgaria	11.9	21.5	21.9	23.7	24.7	27.1	27.0
Czechoslovakia	19.9	31.5	33.5	34.0	35.4	36.6	38.4
East Germany	18.5	30.1	33.6	34.0	35.6	37.0	38.0
Hungary	8.8	14.4	16.1	17.0	18.7	19.6	21.5
Poland	15.6	27.3	25.8	27.5	28.9	26.9	28.1
Romania					.4	1.5	2.0

Fig. 1. Soviet exports of crude oil and oil products to Eastern bloc 1970-1980. Source: Adopted from Hewett (1981).

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With this came severe cuts in social as well as military spending. As Gati argues (1984, ch. 4) East Europeans resented the Soviets, feeling that they had subsidized the ideal of the Soviet Union to the detriment of their own falling standards of living. They compared themselves not to the Soviets, but to their Western neighbors.

At the same time, the Soviet Union remained heavily reliant on windfalls from energy trade, which were vulnerable to violent price fluctuations in the global energy market. Fig. 2 shows the USSR dependence on energy exports from 1970 to 1986. This reliance on windfall profits meant that when the price of oil increased significantly in the 1970s, the Soviets redirected their sales to the West to the detriment of their relations within CMEA. The 1973 Arab oil embargo was critical to sustaining the Soviet economy. The Soviets shifted domestic demand to non-oil supplies and sold more petroleum to the West to increase oil windfalls. At the same time they traded gas-for-pipe with CMEA, urging the countries to follow the Soviet model of heavy manufacturing sector dependent on gas supply. By the late 1970s, energy was the single most important commodity in the trading relationship between the USSR and CMEA.

However, quicker than imagined, the USSR went from being the only major industrial country of the world to be self-sufficient in energy to a country with a rapidly depleting indigenous supply. By the early 1980s, the Soviets were coming to a sober assessment of their declining ability to supply the Eastern bloc. As early as 1981, Moscow faced a balance of payment crunch and was forced to limit oil exports to CMEA countries, breaking a promise that Premier Aleksei N. Kosygin made to CMEA members in spring 1980 that Soviet energy exports to CMEA would remain at their 1980 levels from 1981 to 1985. A 'gusher mentality' had led to waste; easy oil was poorly extracted and older wells lay idle. In 1976 Soviet geologists failed for the first time to meet their assigned targets for identifying reserves, which began a decline in the rate of production growth. The decline was attributed to challenging geophysical characteristics of the deeper oil and associated technology and higher costs of production.

Controversially, the CIA warned of an impending decline in oil production by the mid-1980s, predicting that this would lead to the need for CMEA to import oil from non-Soviet sources (Central Intelligence Agency, 1980b). Indeed, by 1985 the costs of commissioning new wells and sustaining older ones resulted in a 12-million ton drop in the production of oil in the USSR (Office of Technology Assessment, 1980; p. 305). Output peaked in 1988 and Soviet oil production continued to decline through the dissolution of the Soviet Union and into the mid-1990s, when output was half that of 1938. Like oil, the gas industry was also moving east of the Urals and difficult conditions, that is, desert in Turkmenistan, permafrost in northern Tyumen deposits, posed serious challenges for production and transport (Hewett, 1984; p. 69). The really big change in gas transit to Europe came in 1967 with the opening of the Brotherhood pipeline to Bratislava, Czechoslovakia, and again in 1978 with links to Austria, Bulgaria, the GDR, West Germany, Hungary, France, Italy and Finland. However, as with oil, deliveries to Europe suffered cuts by up to one-third in the early 1980s, due in part to adverse weather conditions in Siberia (Done, 1981). Additionally, as fields in West Siberia increased so too did production transport costs (Campbell, 1976; pp. 1–5; Gustafson, 1989; p. 75).

The Soviet budget was heavily dependent on the sales of fuel for technology for future growth, but expectations fell short. Rising world energy prices (particularly the oil spike in 1973–1974) and growing volumes up through the early 1980s meant that energy exports as a share of total Soviet energy produced grew steadily. Western estimates placed oil as the source of 33–40 percent of hard currency earnings by the 1970s and in 1976 earnings from petroleum trade earned twice that of military arms sales (Dienes and Shabad, 1979; pp. 4–6). However, with the collapse of world petroleum prices in the mid-1980s

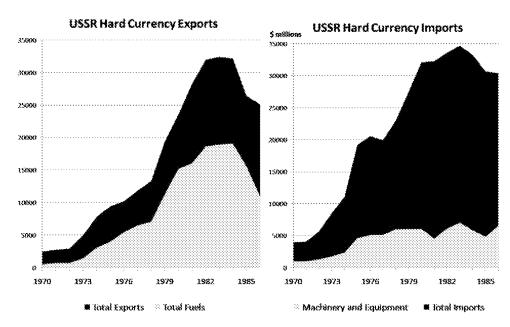


Fig. 2. USSR dependence on energy exports, 1970–1986. Sources: Central Intelligence Agency 1988; United States Congress Joint Economic Committee 1979, 1988.

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coupled with a decline in production, the Soviet Union's hard cash earnings were significantly depleted. It has been calculated that Soviet gas exports to the West earned almost no official hard currency until 1980 because they were totally mortgaged against repayment on equipment. This was the result of a realization by the Soviets in the 1970s that the domestic economy could not produce the equipment on the scale and within the timeframe required and therefore imports of technology were required in the short-term (Stern, 1984; p. 56). Even when the Soviets began earning cash from oil sales it was minimal, as they undersold the market in order to attempt to guarantee sales.

Given this situation, Soviet authorities tried varying tactics to reduce the oil supply to CMEA. First, they subsidized gas almost equally in an attempt to induce substitution of gas for current oil shipments. Second, they worked to implement programs of energy conservation. Third, they promoted more use of nuclear power. However, following the Soviet model, the economies of the Eastern bloc were driven by the development of heavy industry, which increased the energy intensiveness of the whole economy. Energy consumption patterns were developed on the basis of extensive domestic coal resources and inexpensive internal and Soviet oil provisions. Excluding Romania, the USSR accounted for 88% of the oil shipments to the CEMA countries in 1978. The Orenburg pipeline also considerably increased the Eastern Bloc's import of gas, tripling imports between 1970 and 1975. In 1979 energy imports from the Soviet Union accounted for one-half or more of the total energy consumption of Bulgaria and Hungary and approximately one-third for Czechoslovakia and East Germany. Hence, the desire to change these patterns of energy consumption was overtaken by a 20-year experiment that left the Soviets obliged to fuel the Eastern bloc.

As previously noted, by the late 1970s both the Soviet Union and the Eastern bloc were looking West for fuel sales and technology imports. A virtual world based on convertible currencies allowed for the unofficial sale of Soviet supplied oil by third parties for cash. This required an aura of secrecy in many cases, as the movement of dollars, business relationships with Western companies and banks went against the Communist doctrine. Sales to Western Europe from the USSR occurred through a complex web of relationships between commercial coordination offices abroad, headed by Soyuznefteexport, resurrected in the 1970s when the price of oil spiked. Banks and companies in Vienna that serviced the oil exchange (Donoubank, VTB, IMAG trading company), and Joint Stock Companies were established in late 1980s to further support this trade. The Eastern bloc countries traded oil through intermediary companies, or international commodity trading firms registered in Europe.³ In the early 1970s, the Eastern bloc countries were able to balance their petroleum requirements and increase exports to the non-communist through sales of 'above contract' oil to the West. The Eastern bloc was selling 1.2 million barrels per day of oil to mainly Scandinavia, West Germany, and Italy, meeting nearly 10 percent of their customers' demand (Campbell, 1976; p. 27). Even in the hard economic times of the 1980s, the Soviets offered above plan oil for hard currency or goods.

This system of above plan fuel traded as a commercial commodity in the capitalist market was kept hidden from the public. According to Crane (1986, p. 18): "The Soviets wish to hide from their people transfers of wealth to the ungrateful East Europeans, and the Eastern European elites want to cover the sale of national honor for a few barrels of oil."

Thus, it was quickly figured out that if you stayed dependent on Russia, unlike Romania, you got subsidized. In fact, the largest recipients of this scheme were the GDR and Czechoslovakia, followed by Hungary and Bulgaria, with Poland next, and then Romania. This was an interdependent relationship in which both East European and Soviet leaderships benefited for a time. In the end, however, the Soviet Union was not able to fully control this system, particularly as the spoils from the informal sector grew and the subsidization of fuel sales tipped in favor of the Eastern bloc (Brada, 1988; p. 646).

In sum, the USSR incurred large economic costs for political influence within the CMEA and, in the end, compromised their own economic viability. Meanwhile, the Eastern bloc felt cheated by the unstable system of subsidies and TRs. Credits came in the form of official and unofficial transfers of energy. Officially, subsidies in the form of cheaper oil in exchange for overvalued goods put the CMEA countries at an advantage. After the OPEC oil embargo of 1973, both parties scrambled for sales of oil on the Western market, taking advantage of a swift price spike. However, to meet increased demand for oil, the Soviets had to resort to short-term practices of over producing mature fields, leaving others unexplored. This ultimately led to concerns of shortages and the Soviet Premier's announcement that the end to cheap oil had arrived in the mid-1980s. Informally, both the Soviets and the Eastern bloc were increasingly engaging in 'above plan' energy exchanges on the Western market for much needed cash. While the public was unaware of the specific plan to resell oil to Western Europe or the complex web of multinational Soviet firms, the Eastern bloc citizens were keenly aware that life in Western Europe had far outpaced that of the communist ideal.

It is odd that the subsidies remained relatively stable over 25 years and the desired volumes of subsidies grew over this time despite changes in the Soviet's ability to influence politics and strategic objectives by other means. In the 1970s when the USSR had increasing strategic parity with the U.S. and the economy was growing, it increased volumes of subsidies to the CMEA. In the 1980s when tensions with the West increased and the price of oil dropped, subsidies were decreased (Brada,

² Poland had hard coal deposits but little production of oil or gas. Bulgaria and Czechoslovakia were the poorest in natural resources. East Germany had brown coal and Hungary had some oil and gas reserves. Romania was the only crude producer.

³ Interview with former Polish state energy official during the Soviet Union, Warsaw, Poland, June 2007. Several of these companies, including Philbro and Marc Rich & Co AG, were started or had support from Marc Rich. Rich is credited with having created the spot market for crude oil in the early 1970s, revolutionizing commodity trading. His legacy commodity trading company is Glencore International AG, founded in 1974. **Spot market**: The spot market or cash market is a public financial market, in which financial instruments are traded and delivered immediately. The spot market can be of both types:* an organized market, an exchange or* "over the counter", OTC...

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1988; p. 647). The reason could be that it was designed not to pay for unconventional benefits (political/military), but to compensate for economic support CMEA countries were to provide to the USSR in terms of labor, technology and manufactured goods. Or perhaps the subsidies were so minimal as to have very little connection to the unconventional benefits. The question remains whether the above board oil filled the void of an 'energy tool' by providing the leaders some amount of compensation for the less than tangible subsidies system.

The post-Soviet era of gas: legacy upheld

After the collapse of the Soviet Union in 1991, Russian oil and gas production levels dipped and did not reach 1990 levels again until 2005. Additionally, Russia experienced a major economic crisis in 1998 resulting in its default on state loans, precipitating in the collapse of most of its private banks. This, coupled with record low market prices for hydrocarbons, meant that Russia's foreign financial reserves all but disappeared. However, despite these setbacks, Russia still was able to meet hydrocarbon supply commitments to European states. Russia maintained gas supply to its 14 European customers, increasing export volumes to nine of these, and added Greece as a client in 1996. This was partly due to a significant decline in consumption of hydrocarbons as a result of the collapse of the industrial complex throughout the former Soviet space and Central Europe. This was also the result of some Western investment in Russia and Central Asia in upstream development and pipeline construction for export (Closson, 2008).

With the decline in oil production in the USSR and its replacement in CMEA trade by Persian Gulf oil in the 1980s, gas became the new oil by the 2000s. Gas was supposed to shore up Russia's power both domestically and internationally. Speaking before the Russian Security Council at the end of 2000, President Putin proposed to make the Russian fuel and energy complex the prime engine for strengthening the national economy and he set as a task achieving world leadership in energy as the mid-term goal. Russia's prosperity depended on gas, as General Secretary of the Communist Party Leonid Brezhnev had suggested in relation to oil in the 1970s. There were references to this policy in the 2003 Energy Strategy of Russia up to 2020 which stated, 'Russia possesses great energy resources...which are the basis of economic development and the instrument for carrying out internal and external policy' (Government of Russian Federation, 2003). President Putin's speech at the meeting of the Russian Security Council at the end of 2005 put a name to the policy: 'energy super-state'. Subsequently, energy was included as a central topic of the Russian-hosted 2006 G8 Summit in St. Petersburg. This strategic objective was expanded upon in the National Security Strategy (2009) under Prime Minister Putin. Paragraph 9 of the doctrine stated: "The change from bloc confrontation to the principles of multi-vector diplomacy and the [natural] resources potential of Russia, along with the pragmatic policies of using them has expanded the possibilities of the Russian Federation to strengthen its influence on the world arena."

In order to carry out his agenda, President Putin sought to rebuild the central state and to establish the presidential administration as the dominant political institution. Doctoral candidate Putin had emphasized in 1999 the importance of the resource sector for Russia's economic and geo-strategic revival. To this end, the state must be the primary decision maker overall matters concerning natural resources. Putin (1999) advocated the creation of vertically integrated state companies to further Russian interests. Hence, by the mid-2000s, Gazprom was the majority state-owned hydrocarbon monopoly controlling presidentially mandated minerals under government control with a geopolitical mission of cornering markets, particularly in Europe (Bilgin, 2011; Hashim, 2010). It was also a near-monopoly operator, running the entire interregional high-pressure gas pipeline network through which all Russian gas was shipped, holding the rights to all gas supplies to Europe, and owning all gas storage sites in Russia. Independent gas producers were trying to enter the market, but there were strict regulations on refining and accessing pipe. Oil companies with association production of gas resorted to partnerships with Gazprom to get their gas to market, including Lukoil, Rosneft, and Surgutneftegas. That said, Gazprom's potential profit was sacrificed for much of the first 20-years of Russia's independence because it was forced by the state to sell gas at subsidized prices to the Russian domestic market, as well as to the former Soviet republics (Gaddy and Ickes, 2005). Indeed, foreign companies, such as Exxon and Mobil, have also come under pressure from the government to sell gas from their development at Sakhalin on the domestic market at subsidized prices, rather than the more lucrative Asian market.

Trade remained a tool for Russian leadership to gain influence in the CIS, but far less so in the former CEMA states. That is because in the 2000s there was a different set of rules, as all of the former CMEA members except for Russia became members of the European Union. Trade depended more on enterprise relationships than government-driven cooperation in several of the CMEA countries, convertible currencies were used instead of the non-transferable ruble, and trade was based on more realistic pricing. Trade was also meant to be more competitive, transparent, and lawful. There was no longer a hegemon in the trading system but several suppliers to the region. A growing number of alternatives existed for former CMEA members, including other sources of gas from Norway, the United Kingdom, North Africa and the Middle East. There were also increasing alternatives to traditional fuel oils, such as renewable resources (wind, solar, bio-fuels), nuclear, as well as new technologies for capturing carbon during coal usage and for exploring sources of unconventional gas. As a result, Russian gas as a share of EU-27 primary energy consumption (all energy sources) was only 6 percent in 2008. There are only a few states that have absolute volumes and the share of their total primary energy supply dependent on Russia: the Baltic States, Hungary

⁴ Information requested by author from International Energy Agency database at http://www.iea.org/Textbase/stats/index.asp. Information sent to author by e-mail, March 12, 2008.

	Unpredictable production cycle	USSR	RF
Finance	Inadequate inter-external transport infrastructure	USSR	RF
	Poor long-term investments for future production	USSR	RF
	Subsidies in internal sales	USSR	RF
	Discriminating pricing policy to external market		RF
	Barter hydrocarbons for materials/technology		RF
Mechanisms	Gas prices lagging behind world market prices (tied to		RF
Mechanisms	oil)		
	Take or pay long-term contracts with Europe	USSR	RF
	Dependency on hard card earnings		RF
	Lack of single coordinating authority on energy trade	USSR	RF
	Special banking structures established in WE	USSR	RF
	Use of intermediaries in gas distribution		RF
	Limiting resale of gas to third parties		RF
	Cut-off supplies (or threat) to exert pressure on customers	USSR	RF
Politics	Reliance on (former) intelligence officials to conduct sales in Europe	USSR	RF
	Division between US and WE on policy	USSR	RF
	3 WE proponents (TT, FR, GE) of expanding cooperation with RU	USSR	RF
	RU Leadership balancing exports and internal energy demand	USSR	RF
	Energy allocation used as a 'reward' for loyalty	USSR	RF

Fig. 3. Comparing USSR and Russia (RF) in energy business. Source: Author's own compilation.

and Slovakia. Thus, whereas the economic and non-economic benefits of trade with Russia used to be directly linked, the political benefits for the former CMEA states to trade with Russia appeared to be much less than before.

For Russia, however, the similarities between the 1970s and the 2000s are striking, in terms of finance, mechanisms and politics of trade (see Fig. 3). Throughout the 2000s, investments in new production and transport were negligible. Russian infrastructure for gas still serviced Europe only. The production cycle remained unpredictable and Russia remained heavily reliant on imports from Central Asia to meet European demand. Continuities also existed in terms of the mechanisms of trade. Then and now Russia used implicit subsidies, barter arrangements, and discriminating pricing, particularly with its former Soviet republics of Armenia, Belarus, Georgia, Moldova, and Ukraine, all current and former members of the Commonwealth of Independent States. The CIS is a loosely configured organization originally created by then-President Boris Yeltsin as the Soviet Union dissolved. In this article the organizational title is used to connote the geographical grouping of former Soviet states rather than as a functional and effective organization that manages energy trade. Hence, much like the CMEA, relations concerning energy trade remained bilateral between Russia and the members of the CIS, rather than multilaterally under the umbrella of an organization.

In dealing with CIS states, Russia could have learned from its use of subsidies to CMEA members during the Soviet era that, in fact, subsidies would not garner the political allegiance sought by Moscow. Rather, subsidies would sacrifice the financial wherewithal of Russia, the supplier. After all, Soviet subsidies to the CMEA failed to adequately develop the Soviet energy sector, strengthen East European economic dependence on the USSR for the long-term, and actually led Eastern Europe to seek out stronger economic ties with the West. It is not entirely clear whether Russian elites consciously planned to re-apply the rules of energy trade policy between the USSR/CMEA to the new environment of post-Soviet states/CIS. In the early 1990s, sustaining the integrated Soviet economic system for the benefits of Russia proved to be inadequate, as the quality of goods was poor, that is, bartered materials in exchange for hydrocarbons. This was clearly a transition legacy issue, with the formerly integrated states shifting from an internal payments system to one based on international trade, wherein most CIS states lacked cash to pay for energy supplies. Despite requesting that the CIS states such as Ukraine should pay market prices as early as 1993, gas trading was conducted under bilateral intergovernmental agreements that included sales, transit volumes, prices and, where appropriate storage and the establishment of joint production ventures. Through these bilateral contracts, Russia continued subsidies well into the late 2000s with the most generous going to the former republics most strategically aligned with Moscow. These included Armenia, Belarus, and, to a lesser extent, Moldova.

In order to create the 'energy super-state' sought after by Putin, subsidizing the CIS states would be an important factor in attempting to control energy sales to Europe, including supplies from Central Asia to Europe through Belarus and Ukraine,

⁵ Ukraine was one of three original founders, but is now only a de facto member (attends meetings, as the parliament never ratified the Charter). Georgia withdrew from the CIS in August 2009, one year after the war with Russia concerning the autonomous region of South Ossetia in Georgia.

	Ukraine	Belarus	Moldova	Georgia	Armenia
2005	50	55	80	65	54.1
2006	95	55	160 (second half of year July)	(second half of year	
2007	135	118	172 235 (average)		110
2008	179.5	126.8	232 (average)	n/a	n/a
2009	232.4 (est.)	151	263 (average)	n/a	n/a

Fig. 4. Pricing of Gazprom's gas to several CIS states in \$/TCM, 2005-2009. Source: Balmaceda (2012).

while avoiding competition from the southern corridor across the Caucasus. Putin wanted to prevent the construction of additional alternative pipeline route for Europe, such as the oil and gas pipelines through the Caucasus into Turkey. Control over the majority of sales to Europe would be necessary both for greater windfall profits, as well as to gain control over energy assets in Europe, important for long-term assurances of demand. Through the 2000s, Russia had no alternative to the energy export pipelines through Belarus and Ukraine. Therefore, with prices low through the mid-2000s and much of the gas trade taking place within the ruble zone, compounded by a certain degree of inertia from the Soviet period, Russia lacked a sufficiently strong incentive and leverage to dramatically alter pre-existing Soviet era economic arrangements.

However, this policy increasingly became an ad hoc undertaking during the 2000s, when Russia's continued opening to the world economy was accompanied by rapidly rising energy prices, and its attention to maintenance of relations with CIS states became distracted by the potential wealth from exports to the West. The ad hoc nature of this policy is evident from the variation in pricing for gas over several years to CIS countries in Fig. 4. Russia's pricing was discriminatory in terms of country-to-country, as well as year-to-year. This resembled the pattern during the Soviet era with CMEA members. After the first gas crisis with Ukraine in late 2005, it became the stated policy of the Russian elite to wean the CIS countries from meaningful subsidies and pay market prices. As the price of hydrocarbons began to climb, Gazprom raised its prices suddenly and significantly to some CIS states, announcing that it was moving to commercially-based market pricing, and applying the EU's netback pricing. This meant that CIS countries were to pay the cost of Germany's gas minus transportation costs plus an X factor of profit for Gazprom (Energy Charter Secretariat, 2007). As the majority of Russian gas exports to the European Union were made through Ukraine, providing over two-thirds of Gazprom's revenue, it was particularly important that Ukraine should serve as an example of this new policy.

The actual price of the gas, as in the Soviet days, was often a paper number that was subsidized by various trades, including bartering of goods, transit fees, or a gradual leasing of assets to Russia (debt-for-equity swaps). Therefore, trying to retrieve the real prices former Soviet states paid for gas after 1991 was difficult. As seen in Fig. 5, official figures were not kept for individual countries by Goskomstat, and the organization only began to keep data from 1994 until 1998. Gazprom picked up the duty of releasing figures from 2000 forward, but again only released the overall volumes for sales to the CIS from 2004 to 2008 and not the prices charged. Therefore, we averaged the volumes sold by total profit to get the average price. In addition to not having accurate data kept by the supplier of gas, if we consider that goods bartered for gas were significantly under- or overvalued, or that transit prices were forgiven or under-priced for all of these years, then it is truly difficult to determine the true nature of the gas prices.⁷

This dissolution of the Soviet Union put Russia in the position of being the monopoly supplier of gas to CIS states. Beginning in 1992, Russia had a virtual monopoly on supplying natural gas from Central Asian sources (Turkmenistan and Kazakhstan) to CIS states due to its ownership of the main pipeline connecting Central Asia and the rest of the CIS. Contracts were drawn up with Turkmenistan for supply and Russia for transit, and the CIS states tended to cover the cost with goods and services due to a lack of funds. Various structural issues, such as sabotage of the pipelines, explosion of energy plants, and decaying pipes and equipment, disrupted gas supplies. This, plus the inability to properly track the volumes delivered as the result of faulty meters and leaking pipelines resulted in strained relations. Several CIS member states accrued hundreds of millions of dollars of debt to Russia. This put Russia in a position to request assets, for example, gas pipeline and service centers, as collateral in a debt-for-equity swap.

⁶ During President Yeltsin's period, Western energy companies had managed to conclude agreements for the construction of two trans-Caucasus pipelines – the Baku-Tbilisi-Ceyhan pipeline transporting oil and the Baku-Tbilisi-Ezerum pipeline transporting gas.

[,] I thank Margarita Balmaceda (2012) for this insight as written in her own forthcoming manuscript, p. 82, fn. 106.

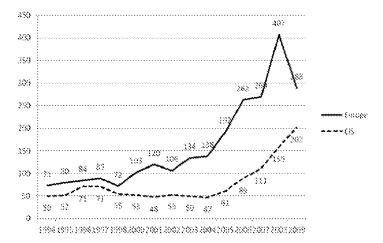


Fig. 5. Comparative natural gas export prices to Europe and CIS. Source: Goskomstat 1994–1998; Gazprom 2000–2009.

The continuation of barter was the legacy of an integrated system in which bartering among the Soviet republics was the way goods were transferred. After independence, CIS were unable to pay cash for hydrocarbons, Russia acquiesced to a system of barter. Russian oil and gas was traded for goods that would have little value on the Western market and were often of poor quality; also a legacy of the Soviet system. Barter schemes continued well into the mid-2000s for Russian gas trade with Belarus and Ukraine and accounted for over half of the trade. Over time, Russia demanded more in exchange for hydrocarbons, including increased transit through pipes and use of ports and storage facilities. Russia also wanted access to sell directly to industry in CIS states and their incurred debt was sometimes traded for an asset transfer to Russia, including the transfer of shares in part of all of refineries, power and petrochemical plants, and pipelines. This created a 'debt trap' in Armenia, Belarus, Georgia, Moldova and Ukraine – with unpaid gas leading to loans and asset swaps, placing these countries in an even more dependent relationship with Russia (Nygren, 2008; p. 8).

For example, Moscow demanded a share of Belarus' state-owned gas company, Beltransgas, in exchange for maintaining low, or subsidized, gas prices for Belarus. In a 2005 agreement with Gazprom, the Belarusian side agreed to sell its segment of the Yamal pipeline in exchange for maintaining current gas prices throughout 2006 and for Gazprom supplying an additional 10% of gas for that year (http://www.gazprom/ru/eng/news/2005/12/18593.shtml). Finally in 2007 Belarus agreed to gradually cede controlling shares of Beltransgas to Gazprom by 2010 for \$2.5 billion plus incremental increases in gas prices. However, Belarus continued to find ways of avoiding paying full price for the gas, with nearly half paid in credit. This was secured by Russia at the last minute in winter 2007. So-called stabilization loans continued to be provided by Russia to Belarus in the billions of dollars through 2010. Hence, after 1991, barter with the CIS states was supplemented by asset swaps and loans. This made for a convoluted and difficult to manage energy relationship that was susceptible to the whims of the politicians on an annual basis. Similarly, when Russia wanted to double the gas price for Moldova from US \$80 to US \$160 per BCM in 2005, an agreement was not reached and Gazprom shut off the gas in January 2006. Gazprom gained more shares in MoldovGaz and Moldova got gas prices at US\$ 110 only for half-a-year, gradually increasing over five-years to US\$ 250. Even if the CIS states wanted to diversify their sources of gas, like the CMEA states did, it would be difficult due to the Soviet legacy of dependence. The CIS states in the late 2000s lacked an independent infrastructure; their domestic pipelines were linked to transit pipelines from Russia to Europe. Several of the states also lacked gas storage facilities. Thus, they had fewer options for diversification of gas suppliers. Only Georgia had access to the alternative pipeline from Azerbaijan (Baku-Tbilisi-Ezerum) and, when needed, revived a pipeline from Iran. CIS countries shared other Soviet legacies, such as having a highly industrialized sector dependent on Russian gas, that was also highly inefficient and therefore gas intensive.

As with the CMEA members, the CIS states resorted to manipulating what oil and gas did flow through their states. Whereas the CMEA states received 'above contract' oil to resell, Belarus was adept at refining Russian crude and reselling it to Western markets for a mark up plus export duties, but minus 'import' prices from Russia. When oil prices climbed in the mid-2000s, however, Russian authorities claimed back half of the export duties. In the era of gas, the availability of offshore registration of companies and more fluid sources of cash made the creation of companies that trade and resell gas a lucrative business in the CIS states. The business began with *Itera*, an offshore Russian gas trader and producer headed by Rem Vyakhirev who acquired exclusive rights to trade gas among the former Soviet states when Viktor Chernomydrin headed Gazprom. Russian authorities wanted to avoid accumulated state debt-for gas sales to customers in the former Soviet republics who were unable to pay. So Soviet *nomenklatura* who previously worked together headed intermediary companies and revitalized the barter system between Turkmenistan and Ukraine in gas deliveries. As a result, between 1995 and 2002 CIS

⁸ For detailed scheme of this operation, see Balmaceda forthcoming manuscript (2012).

state enterprises incurred a heavy debt to Russia's *Itera*. In Georgia, for example, *Itera* entered into deals with the management of enterprises targeted for privatization. The intention of the scheme was to use the intermediary company to incur debt-for gas supply, transfer the debt to creditors backed by the Georgian government, creating a situation in which a debt-for-equity swap could be arranged with Russia; gas debt in exchange for strategic energy assets.

Many intermediary companies were eventually jointly created by Russia's state gas company Gazprom and the consumer state's national company, with a small percentage of 'other', such as RosUkrEnergo and UkrGazEnergo⁹ in Ukraine or Arm-RosGaz of Armenia. Starting in January 2006, Gazprom demanded that the price of gas to Ukraine go from US\$ 50 to US\$ 160. Ukraine refused and threatened to siphon off Russian gas in transit to Europe, in an attempt to tie the transit and supply aspects of the gas business. This particular gas conflict ended with a complicated formula of gas trade through an intermediary company RosUkrEnergo, based in Switzerland and owned in part by Gazprom. RosUkrEnergo would buy gas from Gazprom at US\$ 230 BCM (bought by Gazprom from Turkmenistan for US\$ 100 BCM) and RosUkrEnergo would resell it to a Ukrainian company for US\$ 95, but Ukrainian transit fees would increase by 50 percent.

Beginning in 2002, President Putin changed company leadership of Gazprom to Alexei Miller conducted of the intermediaries, but the schemes remained unchanged. Through intermediaries, Russia was able to overuse its market position to vary pricing and to gain more access downstream to markets. It also attempted to thwart efforts by consumer states to diversify sources of gas supplies by sweetening the gas deals supplied through intermediary companies. These companies tended to indebt the producer and consumer states as the mark up on the original price of gas could be almost 50 percent, but the revenues did not make it into the official government accounts. Because this money was non-transparent it is also was not taxed. These schemes ultimately meant a loss of dividends to Gazprom and the state budget. Intermediary gas supply was also unreliable as these companies were often removed when financial infractions become snared in politics and had to be terminated quickly to avoid legal action.

The accumulation of the practice of subsidies, whether through barter, tariffs, debt-for-equity swaps, short-term loans, or less transparent sales of gas through intermediary companies, worsened relations between Russia and the CIS members. There were tens of instances of oil and gas cut-offs to the newly independent states, but they were almost always blamed by Moscow on the consumer states' inability to pay, a repair of a pipeline, or an unknown cause. The countries more often felt that it was related to their strategic objective to integrate into trans-Atlantic organizations, particularly NATO. Putin appeared to verify this belief when he said that Russia would not subsidize energy prices for "Orange" forces, or the pro-Western Yushchenko administration swept into power by the 2004 street protests named the "Orange revolution." Western experts argued that the stoppages to the Baltic States during the early 1990s marked the beginning of Russia's use of its hydrocarbon supply as a political tool, which lasted well into the 2000s (Smith, 2006; Goldman, 2007; p. 362). Disputes between Russia and its two primary CIS transit states, Belarus and Ukraine, over nonpayment for supply and pricing of hydrocarbons also resulted in temporary shutoffs of oil and gas from Russia. In response to nonpayment, Russia's stoppages of gas to Ukraine began in 1992–93, but did not receive international attention until the pricing dispute in winter 2005–2006. A more recent cut-off in 2009 to Ukraine was, once again, blamed on Ukraine for not paying its bills and missing deadlines for finalizing a transit agreement. However, the Ukrainian government expressed concern that it may have been related to its goal of obtaining NATO membership and for supporting Georgia in August 2008.

Hence, rather than strengthen political allegiance of the former Soviet states to Russia, the use of gas subsidies as a lever and the unpredictability of price and supply pushed these countries away from Russia. First, the cut-offs of hydrocarbon supplies resulted in political backlashes from the CIS states' leaders. Belarus' President Lukashenko held up the establishment of a customs union with Russia and Kazakhstan with demands for continuation of cheap oil and gas supplies from Russia. He also fell out with Prime Minister Putin over refusing to recognize the independence of Abkhazia and South Ossetia from Georgia, as well as providing safe haven for Kyrgyzstan's deposed president, allegedly ousted with the Russian government's acquiescence. Moreover, Belarus, Georgia, Moldova, and Ukraine at various points in the past ten years have sought membership in trans-Atlantic organizations, including the EU and NATO. Likewise, the Georgians, Ukrainians, and Kyrgyz led "colored" revolutions to overthrow seemingly inept Soviet era politicians in favor of pro-Western candidates. Second, gas cut-offs spurred the CIS countries to look for alternative supplies and suppliers. For example, whereas Georgia used to have just 2 gas suppliers - Russia and Azerbaijan - before the 2006 gas cut-off from Russia, it soon had almost half a dozen independent suppliers vying for the market. Ukraine since 2009 was dedicated, albeit slowly, to improving efficiency in order to decrease gas imports. It was also working to secure more storage facilities and to improve energy efficiency overall. This was encouraged by the EU after the 2009 gas cut-off to Ukraine resulted in energy shortages in South East Europe for the first time since the 1960s. Third, there was backlash among the countries parliaments and publics on ceding further assets to Gazprom, particularly pipelines in Georgia and Ukraine. Thus, in both the CMEA and CIS, energy

⁹ UkrGazEnergo was jointly owned by RosUkrEnergo and Ukraine's NaftogazUkrainy for the purposes of selling gas on the Ukrainian market. In the March 2008 agreement leading up to the gas cut-off in winter 2009, Ukrainian leaders were insisting that UkrGazEnergo be eliminated.

¹⁰ Between 1998 and 2000, Russia's state-owned oil transit monopoly company Transneft stopped the flow of oil to Lithuania nine times under contractual obligation from Lukoil. Russia also terminated oil deliveries by pipeline to Latvia's Ventspils terminal in 2003. More recently in 2007 as the Estonian government removed a Red Army monument from the center of Tallinn, the state-owned Russian Railways suddenly halted oil deliveries to Estonian ports.

trade did not play favorably for the Russians in terms of managing the alliance, nor did it translate into political power for Moscow.

Then and now: more of the same?

Like the Soviet Union, Russia remained heavily reliant on windfalls from energy trade favoring short-term gains over long-term planning. By the 2000s, Russia's energy profits were proportional to GDP and foreign currency reserves (see Fig. 6). Windfall profits remained steady at 60% of Russia's cash flow and Russia was obliged to sell to high-paying European customers and Turkey to make up for an almost equal deficit from subsidized sales on its domestic market (see Fig. 7). Initially, after an almost decade-long decline in production from the mid-1980s to the mid-1990s, the sharp ruble devaluation in the late 1990s reduced costs and stimulated oil production. Domestic demand was holding relatively constant, meaning most of the production increments became available for export. Then the Organization of Petroleum Exporting Countries (OPEC) began to raise oil prices by reducing supply. Prices did respond, providing an additional incentive to the now privatized Russian oil companies to invest in production.

The gas sector should have responded similarly, but Gazprom did not invest more in production in the first two decades. Gazprom's behavior was rational for Russians: security of demand over supply. It was in the economic interests of Gazprom to cause a relatively small gas deficit in EU markets and to control supply infrastructure. But not so big a deficit as to raise prices and limit cost effectiveness of infrastructure building for alternative suppliers, or to drive customers to diversify to other sources of energy. Russia also wanted to avoid gas-to-gas competition that it suffered from in the 1990s in Germany. The Russian approach, therefore, was to control supply infrastructure and distribution companies and then invest in exploration and production.

However, this formula depended on the funds being there in the future for investment. There were several warnings from Western governments and international organizations that Russia did not have the means to meet future European demand. The World Bank estimated that Russia would need to invest \$15 billion per year in its gas sector to meet current Central and Eastern European demand and \$20 billion to meet future projections. Large gas producing regions in West Siberia such as Nadym Pur Taz were running dry. Extraction of gas in Khvarvutinskaya region of Yamburg and Zapolyarnoe had been postponed. Gazprom had invested externally, in Europe and Africa, rather than in domestic fields and pipeline systems. Moreover, future sources of gas were in hard to reach places and would require Western technology, huge investments, and long-haul transport options traversing difficult terrain. Transport infrastructure across Russia was aging and unreliable, losing almost a quarter of volumes in transit.

Russia invested only about US\$4.5 billion in its gas sector in the period 2001 to 2008. Investments in 2008 reached US\$8.6 billion (double the previous four years), but the 2009 financial crisis saw Gazprom lose half of its capital (World Bank, 2010). And, it was unclear if capital would be available in the near-term. President Putin in the early 2000s began to push out foreign investors in favor of Gazprom taking over majority control of exploration projects. Western companies were forced to cede shares in upstream ventures such as Kovytka and Sakhalin. At Kovytka, British Petroleum was forced to sell its 62.9 percent majority stake to Gazprom in 2007. At Sakhalin II Royal Dutch Shell was forced to cede controlling stakes to Gazprom and to pay dividends of about US\$1 billion a year due to delayed production. Plans for an LNG terminal were also scrapped. TNK-BP,

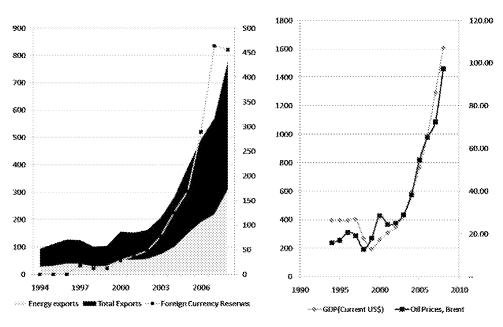


Fig. 6. Russia's dependence on energy export, 1994-2008. Source: Goskomstat, Russian Central Bank; Sources: World Bank, International Monetary Fund.

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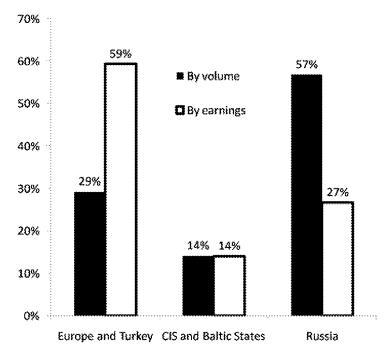


Fig. 7. Gazprom export earnings, 2008. Source: Gazprom.

Russia's third largest oil producer half-owned by British Petroleum, suffered from numerous allegations made against it by the Russian government that have led to broken deals.

The economic crisis of 2009 convinced the Russian leadership, particularly President Medvedev, that the dependency on energy windfalls would not sustain future economic growth. In 2008 Russia's dependence on hydrocarbon revenues had reached an historical peak as a result of high oil prices. However, one year later the global financial crisis caused more damage to the Russian economy than to any other G-20 country. A sharp decline in the price of oil and other commodities, hundreds of billions of dollars in outflows, and large foreign borrowing by banks not only hurt the economy, but made the leadership realize that the formula for growth was unsustainable. In response, the Russian government launched the Skolkova project, an effort to create a state-directed geographic zone near Moscow to attract foreign investment for high tech research and production. The government also announced the intention to make Moscow an International Financial Center. The success of Skolkova in the near-term remains dependent on government finance generated in large part from hydrocarbon revenue and the longer-term health of global financial markets.

This could have several implications for the use of subsidies in the CIS. First, the economic crisis meant that the CIS was down 10% in gas imports in 2010 from first quarter 2009. That is, perhaps as their demand declines, so too will the importance of this trade for Russia. Second, Russia may no longer need to work as hard to block Caspian gas from entering the European market after its own northern corridor is completed in about 2012 (Nordstream) across the Baltic Sea. Moreover, Russia spoiled its relations with Turkmenistan to the point where it was unclear as of 2010 if Russia would be able to import even one-fourth of the amount previously contracted, or 10 BCM (Turkmen gas had been critical to meeting Russia's European commitments.) Regardless, Central Asian gas is increasingly going to China and Iran and the margins of profit for Russia have reduced considerably in the last three years, as Central Asians demand more in price. Gazprom is also being outsold on the European market by Liquefied Natural Gas, more often cheaper and increasingly accessible from North Africa and the Arabian Peninsula to European ports. That is, the CIS transit states no longer appear to be as important to Russia securing the European market.

Finally, there were signs that from 2010 Russian authorities were sincere in their efforts to rid the CIS gas trade of subsidies with transit states, Belarus and Ukraine. Russia moved to sharply reduce the energy subsidies that fuel the Belarusian economy. In 2010, Russia imposed full oil export duties on supplies and threatened to charge netback parity prices for gas next year. However, when Russia cut gas deliveries by 60 percent, Belarus threatened to cut-off supplies to Europe. Ukraine was also meant to be paying higher prices from 2010 and was considering going into a joint venture with its Naftohaz and Gazprom for sales on the Ukrainian market. The intermediary RosUkrEnergo was publically excluded from the gas trade between Ukraine and Russia in 2010. Russia had realized that exporting to the West and building alternative pipelines to support this offered much greater economic gains to Russia than the political leverage and often unreliable compliance afforded by subsidizing energy supplies to the CIS. To what extent these subsidies will be truly abandoned in all forms is unclear, but what is clear is that the Soviet practice of subsidies has been found to be equally unsuccessful in the post-Soviet era.

Conclusion

This article has sought to take the lessons learned from the very rich literature on Soviet energy trade with the CMEA and to apply it to the 2000s to determine why Russia has not been more effective in wielding power through energy supplies. What is different "then" and "now" is that the Soviet Union used energy in the 1960s and 1970s to shore up regimes in the CMEA states that lacked legitimacy. This policy had two aims: to prevent destabilization, as in the Czech Republic in 1968, as well as to ensure that their allegiances remained with the Soviet system. In fact, the double faulty policy of the USSR – implicit subsidies and dependency on windfall profits – had just such a destabilizing effect. By the early 1980s, the CMEA states were selling oil to the West for cash, or bartering for technology. Starting in 1991, Russia provided subsidies to CIS regimes. However, rather than gain allegiance from the leadership through increased subsidies, Russia employed a haphazard policy of giving and taking away of subsidies through transparent and non-transparent energy trade. Annual disagreements over pricing, haggling over transit fees and loans, off-sets through intermediary companies, and debt-for-equity swaps left the CIS states at a loss. Threats to, and actual cut-offs of gas further complicated the negotiation process and led several states to believe their economies were at the mercy of their political alliances. This has certainly not endeared them to Russia.

It is evident that the use of subsidies in CMEA energy trade and the inadequate expenditures on Soviet production continued into the 2000s and resulted in the same political and economic limitations in Russia's influence over the CIS states. Russia gained assets, pipelines, and infrastructure in the CIS. But the question remains whether this has been worth the loss in income from subsidies. Rather than successfully build on the prematurely halted Andropov experiment, Putin transferred patterns of poor energy management from the CMEA to the CIS. While he claimed to be ridding the trade of subsidies, unofficially it continued. Thus, Russian leaders have not been more effective over the past four decades in wielding power through energy supply because they have sacrificed short-term gain for long-term strategy. That is, the management of hydrocarbon sales has tended to favor subsidies in order to secure immediate windfall profits and political allegiances. However, subsidies have neither endured their customers to them, nor have they been a profitable or sustainable model.

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References

Anderson, L., 1987. The state in the Middle East and North Africa. Comparative Politics 20 (1), 1–18.

Arbatov, A., 2007. Is a new cold war imminent? Russia in Global Affairs July – September.

Ascher, W., 1999. Why Governments Waste Natural Resources: Policy Failures in Developing Countries. John Hopkins University Press, Baltimore.

Auty, R.M., 1988. The economic stimulus from resource-based industry in developing countries: Saudi Arabia and Bahrain. Economic Geography 64 (3), 209–225.

Balmaceda, M., 2012. The Politics of Energy Dependency: Ukraine, Belarus and Lithuania Between Domestic Oligarchs and Russian Pressure, 1992–2010. University of Toronto Press.

Beblawi, H., Luciani, G., 1987. The Rentier State. Croom Helm, London.

Bilgin, M., 2011. Energy security and Russia's gas strategy: the symbiotic relationship between the state and firms. Communist and Post-Communist Studies 44 (2), 119–127.

Brada, J.C., 1988. Interpreting the Soviet subsidization of Eastern Europe. International Organization 42 (4), 639-658.

Campbell, R.W., 1976. Trends in the Soviet Oil and Gas Industry. Johns Hopkins University Press, Baltimore.

Central Intelligence Agency, 1980a. Soviet Energy Policy Toward Eastern Europe. PA 80-10160: i-4, April.

Central Intelligence Agency, 1980b. USSR oil problem: views of the Soviet leadership June. http://www.faqs.org/cia/docs/40/0000517305/USSR-OIL-PROBLEM:-VIEWS-OF-THE-SOVIET-LEADERSHIP.html (last accessed 23.05.10.).

Central Intelligence Agency, 1988. USSR: Coping with the Decline in Hard Currency Revenues. April

Closson, S., 2008. Russia's key customer: Europe. In: Perovic, J., Orttung, R., Wenger, A. (Eds.), The Russian Perspective in International Markets. Routledge, London, pp. 89–109.

Crane, Keith, 1986. The Soviet Economic Dilemma of Eastern Europe. RAND, Washington, D.C.

Dienes, L., Shabad, T., 1979. The Soviet Energy System: Resource Use and Policies. V.H. Winston & Sons, New York.

Done, K., 1981. Moscow warns Europe of cut in gas supply. Financial Times January 10.

Energy Charter Secretariat, 2007. Putting a Price on Energy: International Pricing Mechanisms for Oil and Gas. http://www.encharter.org/index.php?id=218 (last accessed 22.05.10.).

Gaddy, C.G., Ickes, B.W., 2005. Resource rents and the Russian economy. Eurasian Geography and Economics 46 (8), 559-583.

Gaddy, C.G., Ickes, Barry W., 2010. Russia after the global financial crisis. Eurasian Geography and Economics 51 (3), 281–311.

Gati, C., 1990. The Block that Failed: Soviet-East European Relations in Transition. Indiana University Press, Bloomington. Gazprom's website, 2005. Gazprom and Beltransgas ink gas supply and transit contract for 2006. http://www.gazprom/ru/eng/news/2005/12/18593.shtml. Gazprom's website, 2008. Export Earnings. www.gazprom.ru.

Goldman, M.I., 2007. The dog barks but the caravan moves on. The Journal of Post Soviet Democratization 15 (4), 360–370.

Goskomstat. Energy Exports/Total Exports, http://www.gks.ru/eng/.

Government of the Russian Federation, 2003. Energy Strategy of Russia for the period of up to 2020, August 28. http://ec.europa.eu/energy/russia/events/doc/2003_strategy_2020_en.pdf (last accessed 10.06.09.).

Government of the Russian Federation, 2009. National Security Strategy of the Russian Federation up to 2020, May 12.. http://www.scrf.gov.ru/documents/99.html (last accessed 10.06.09.).

Gustafson, T., 1989. Crisis amid Plenty: The Politics of Soviet Energy under Brezhnev and Gorbachev. Princeton University Press, Princeton.

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Hashim, S.M., 2010. Power-loss or power-transition? assessing the limits of using the energy sector in reviving Russia's geopolitical stature. Communist and Post-Communist Studies 43 (3), 263-274.

Hewett, E.A., 1981. Technology and Soviet Availability, Office of Technology Assessment. Government Printing Office, Washington, DC (November).

Hewett, E.A., 1984. Energy, Economics and the Foreign Policy of the Soviet Union. Brookings Institution, Washington, D.C.

International Monetary Fund website. Primary Commodity Prices/Oil, http://www.imf.org/external/data.htm.

Karl, T.L., 1997. The Paradox of Plenty. University of California Press.

Mahdavy, H., 1970. The patterns and problems of economic development in rentier states: the case of Iran. In: Cook, M.A. (Ed.), Studies in Economic History of the Middle East, UK. Oxford University Press.

Marrese, M., Vanous, J., 1983. Soviet Subsidization of Trade with Eastern Europe: a Soviet Perspective. University of California Institute of International Studies, Berkeley.

Medvedev, D., 2009. Rossiya vperyod (Go Russia!), September 10. http://news.kremlin.ru/news/5413 (last accessed 10.08.10.).

Nygren, B., 2008. Putin's use of natural gas to reintegrate the CIS region. Problems of Post-Communism 55 (4), 3-15.

Office of Technology Assessment, 1980. Technology and Soviet Energy Availability. U.S. Congress, Washington, D.C.

Putin, V.V., 1999. Mineral'no-syr-evee resursy v strategii razvitiya Rossiiskoi ekonomiki (Mineral resources in the strategic development of Russia's economy). Zapiski Gornogo Instituta144(1). Problems of Post Communism 53 (1), 48–54. Reprinted and translated in H. Balzer, 2006. Vladimir Putin's Academic Writing and Russian Natural Resource Policy.

Russian Federation Central Bank website. Foreign Currency Reserves, http://www.cbr.ru/eng/

Sakwa, R., 2008. New Cold war or Twenty years' crisis? Russia and international politics. International Affairs 84 (2), 241-267.

Shafer, D.M., 1994. Winners and Losers: How Sectors Shape the Developmental Prospects of State. Cornell University Press, New York.

Simes, D.K., 2007. Losing Russia. Foreign Affairs 86 (6), 36-52.

Smith, K.C., 2006. Security Implications of Russian Energy Policies. CEPS Policy Brief, 90, January. http://shop.ceps.eu/downfree.php?item_id=1293 (last accessed March 11.03.08.).

Stern, J.P., 1984. International Gas Trade in Europe: The Policies of Exporting and Importing Countries. Gower, United Kingdom.

The Current Digest of the Soviet Press, 1983. Comecon Holds Annual Session in Berlin XXXV, vol. 42 7-9.

United States Congress Joint Economic Committee, 1979. Soviet Economy in a Time of Change. U.S. Government Printing Office, Washington.

United States Congress Joint Economic Committee, 1988. Subcommittee on National Security Economics. Economic reforms in the U.S.S.R. U.S. Government Printing Office, Washington.
Wallander, C., 2007. Russian Transimperialism and its implications. The Washington Quarterly 30 (2), 107–122.

World Bank website. Data for GDP, http://data.worldbank.org/.

World Bank, 2010. Lights Out? The Outlook for Energy in Eastern Europe and the Former Soviet Union, March 18. http://siteresources.worldbank.org/ ECAEXT/Resources/258598-1268240913359/Full_report.pdf (last accessed March 24.03.10.).