POISONED BY GAS: DOMESTIC NETWORKS AND ENERGY SECURITY STRATEGY IN UKRAINE

By Emily J. Holland

Traditional views of energy security hold that states without reserves of oil and gas should seek to diversify their supply, therefore reducing dependency on any one supplier. Conversely, this view also holds that states with large reserves are believed to use this advantage as political leverage over their consumers. However, empirically we observe a wide variation in energy security strategies by dependent states. While some states do choose costly diversification, this paper introduces a new concept of energy security strategy: active dependence. Under active dependence, states that are reliant on a single supplier of energy do not succeed at pursuing diversification policies, but rather focus on increasing ties with their main supplier state across a host of issues. This active dependence often manifests through a number of cooperative initiatives with their supplier state and favorable energy contract renegotiations. Given the extreme variation in consumer state behavior, what explains variation in the choice of energy security strategy in energy dependent states? Using the case of European natural gas dependent states in the post-Cold War period, I present a theoretical model that accounts for regional variation in consumer vulnerability and choice of energy security policy. I argue that two main variables contribute to the choice of either diversification or active dependence as an energy security policy: the presence of energy veto players and the presence of weak formal institutions. After presenting the puzzle and model, I provide a preliminary account of the origins of these variables. I then present a case study of Ukraine, with evidence gathered from primary and secondary sources, plus extensive regional fieldwork to elucidate the mechanisms of my theory.

I. Introduction

In January of 2009, Hungary, Romania, Poland and Bulgaria reported that the pressure in their gas pipelines had dropped. Soon, images of freezing Bulgarian pensioners were splashed across the news media along with accusations that following a gas dispute between Russia and Ukraine, Russia had completely cut off the gas supplies to all of Eastern Europe. The crisis highlighted the fact that many Eastern European states were and remain highly dependent on Russian gas supplies, with some up to 100 percent dependent on a single supplier: Russia.

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on Russian gas supplies, with some up to 100 percent dependent on a single supplier: Russia. Although this was not the first time a gas dispute between Russia and Ukraine caused fear amongst the European community about the strategic safety of their energy supplies, it became a lynchpin in the European project to push a cohesive energy security policy.

However, many European states have failed to diversify their supplies in the face of energy insecurity, including Ukraine, who has had its gas supplies shut off more than three times in the last decade. While secure and uninterrupted access to energy is crucial to state security, some states fail to formulate and implement these policies and remain subject to the whims of producing states. Instances abound of neighboring states with similar levels of dependence that have wildly different policies and relations with their main energy supplier. Lithuania, for example—a state that was previously entirely dependent on Russia for its natural gas supplies—has made great strides in decreasing its energy dependence and diversifying its energy security strategy. However, its neighbor, Latvia, has neglected to formulate a cohesive energy security strategy that seeks to decrease dependence on Russia, its main supplier. What explains variations in the energy security policies of similarly dependent states?

Despite the obvious importance of international energy trade, conventional wisdom about energy markets dictates that outcomes arise on the basis of a realist market power trade-off between price and dependence. According to this logic, states attempt to get the best price possible for energy given their level of dependence on the producer state. Market power explanations may be helpful when understanding some pricing disputes, but they cannot provide insight into how and why states formulate their energy security policies or why some states pay more than their level of dependence would indicate. Nor do they explain why some states like Lithuania invest in costly strategies to wean themselves off dependence, while others, such as Ukraine, are unable to make cohesive energy security policy despite a pressing need. Instead I argue that state energy policy and outcomes of international energy trade are driven by domestic level political capture, or regulatory corruption, that goes on below the surface of market transactions. Rather than a simple analysis of the trade-off between price and dependence, I argue that market choices are tied in with political choices on the domestic and international levels. I propose a theoretical argument that looks to domestic level capture and differences in policy preferences between domestic groups and policymakers and variations in institutional strength and design. Not only is unraveling the puzzle of international energy relations and domestic level energy policy formulation critical to increasing our theoretical understanding of state behavior, it also has crucial and pressing policy implications.

As Ukraine fights to redefine itself post-Maidan, reframing its energy security policy is at the top of its agenda; enacting substantive change, however, has proven to be difficult. Ukraine has sought concessions from the European Union (EU) to alleviate its precarious situation, yet it remains locked in a mutually dependent relationship with Russia with regards to both energy supplies and transit.

II. STRONG PLAYERS, WEAK RULES

Energy security has been a clear priority for energy dependent states since before WWI. When exploring an option to switch from coal from Wales to oil supplies from Persia, Churchill declared, "Safety and certainty in oil, lie in variety and variety alone." According to the traditional view, states without vast reserves of oil and gas should seek to diversify their supply sources, thus reducing dependency on any one supplier. Increasing supply sources both reduces the impact of a disruption from any one supplier and increases bargaining leverage for lower prices or better terms. Daniel Yergin argues that energy deficient states should seek energy "resilience," a buffer against shocks and disruptions such as spare capacity, strategic reserves, storage and stockpiling.² Albert Hirschmann argues, in his book National Power and the Structure of Foreign Trade, that states reliant on energy imports will seek to reduce their dependence on any one upstream provider so that they may avoid being "held hostage." According to his logic, downstream states should seek to diversify their supply of energy across a broad spectrum of suppliers, thereby reducing the level of dependence, and possible vulnerability to coercion, on any one upstream state.³

However, diversification of energy does not mean just diversification of supply. States with little access to other suppliers can increase their energy security by increasing storage capacity for reserves, investing in domestic transportation infrastructure and by lobbying and investing in "reverse flow" technology. Recent legislation by the EU mandated that pipeline operators install switchback mechanisms so that Western EU countries could provide Eastern European countries with natural gas from their own reserves in case of emergency. For instance, Ukraine's capacity to import natural gas from its Western European neighbors increased to 40mcm and it has received (Russian) natural gas from Slovakia and Hungary.⁴ Finally, states can increase their energy security by reducing the proportion of natural gas usage in their energy mix, through an increase in renewables, nuclear or fuel solids (e.g., coal).

Current theories can only provide partial answers to why some states diversify and some do not, partially because these types of questions have received relatively little systematic attention. Margarita Balmaceda has written excellent work on the energy policies of transit states, but there is a dearth of literature that delivers an in-depth analysis of the motivations of both producer and consumer states.⁵ So why has it been so difficult for Ukraine, for example, to enact cohesive energy security policy and wean itself off Russian dependence? When scholars and popular literature look at energy markets, they often tend to neglect the political capture going on below the surface that drives the markets themselves.

It is my contention that in addition to the traditional approach to energy security that dictates diversification as the policy most likely to ensure access to a stable supply of energy, there is another path to energy security that flies in the face of traditional wisdom. In practice, an alternative to the costly policy of diversification is simply maintaining a close relationship with a producer state. In contrast to the diversification policy, I call this alternative policy "active dependence." Under active dependence, states that are reliant on a single supplier of energy do not succeed at pursuing diversification policies, but rather focus on increasing ties with their main supplier state across a host of issues. This active dependence often manifests through a number of cooperative initiatives with their supplier state and favorable energy contract renegotiations. For example, Hungary, which is largely reliant on Gazprom for its natural gas supplies has in recent years fostered a close relationship with Moscow on a host of issues—including a contract to build a nuclear power facility and on tackling the "reverse flow" initiative put forth by the EU energy commission—in exchange for increased gas supplies and more favorable contract stipulations.⁶ Moving beyond the diversification model allows for a more nuanced understanding of the choices that states face when formulating their energy security policies.

Energy Veto Players

Because economic development and military effectiveness—both central to state survival—require stable and uninterrupted access to oil and gas, energy security is a central issue of national security. However, despite the fact that energy policy and energy negotiations are routinely made at the highest level, I contend that in many states there are a number of domestic actors at a variety of levels who participate in both the energy trade and in policy formulation. These actors, who can range from corporate actors to warlords to energy industry insiders, are all potential veto players, whose agreement is necessary to change policies from the status quo.⁷ While traditionally veto players are constitutionally defined, in many of the European cases veto players are created by informal, path-dependent processes resulting from both Soviet legacies and post-Soviet institutional reforms such as privatization. Where there are powerful actors

with interests in the energy sector, states must have strong formal institutions to prevent them from becoming active energy veto players. If privatization and institutional reform are incomplete, these actors become veto players that prevent

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the government from creating energy policies that would inhibit their access to rents or profits.

Energy veto players can have a wide range of interests. Corporate veto players prefer the policies that are the most conducive to a good return on investment and reject those that would restrict their profitability. The interests of gas middlemen or local oligarchs are more nebulous, but in principle are similar to those of the corporate players: they dislike potential policies that could disrupt their profit stream and reduce their local influence.

Insights on veto players can help us understand why it is difficult, and in some cases seemingly impossible, to shift energy security policy. It can

also provide insights into why we see neighboring states taking drastically different energy security paths. Variation in the type of energy veto players, their preferences and their links to the policy-making apparatus are key to understanding the choices states make. Where energy veto players prefer active dependence energy security policy, states will be more likely to pursue this strategy over a costly switch to independence that could disenfranchise. Conversely, where energy veto players prefer diversification, states will be more likely to support this strategy.

Institutions

If policy-making existed in isolation, the interests of non-governmental actors such as gas middlemen or corporate giants would not affect the outcomes of energy security policy formulation. In many states, however, these actors and their vested interests have undue influence over policy formulation to varying degrees. Corporate interests in Germany for example, while strong, do not influence German policy to the same extent as similar interests in Italy. Therefore, it is not sufficient to argue that the mere presence of powerful actors alone is enough to affect energy policy. Instead, it is crucial to look at the institutional history and conditions that allow the powerful actors described above to actually become veto players in their regimes.

Where there are weak formal institutions, non-state actors are more apt to exert undue influence on policy making, and we are more likely to see an active dependence strategy. Thus, the institutional setting that creates and enables energy veto players accounts for variation in state energy security behavior and, therefore, the level of vulnerability as consumers and trade partners. I define formal institutions—as do Gretchen Helmke and Steven Levitsky, authors of Informal Institutions and Comparative Politics: A Research Agenda—as rules and procedures that are created, communicated and enforced through channels widely accepted as official.8 Informal institutions are socially shared rules that are usually unwritten and that are created, communicated and enforced outside officially sanctioned channels. It is important to distinguish however that informal institutions are not simply weak institutions. There are many cases where formal institutions are ineffective while informal ones such as clientelism or corruption are very strong. Political actors can respond to a mix of formal and informal incentives, and in some instances informal incentives can be more powerful. In states where formal institutions, such as the rule of law or rules governing the sale and trade of energy are weak or murky, informal networks and rules will take their place. Further, where informal networks are already strong, formal legal enforcement is rarely used due to its high price tag.

Where formal institutions are weak, the likelihood of a lack of transparency in both the energy trade and the formation of energy policy is high. A lack of transparency increases the possibility of corruption and the expropriation of energy-related rents from the state. In states with high levels of corruption, energy can be a very profitable business for local actors, who may act as intermediaries between the upstream state and their home government, taking advantage of favorable tariffs, or even stealing outright from the state. The way in which society is organized often has a direct effect on who the energy veto players are and how they formulate their interests, further complicating this picture. If corruption in the energy trade is high, domestic actors will have a higher incentive to impose their preferences on policy making. In these cases, the energy trade is endogenous to the political process and it can be difficult to distinguish causal pathways.

While the endogeneity issue makes it difficult to determine the initial drivers of energy policy in certain states, what is clear is that in these states in which energy is endogenous to politics, there is more likely to be a policy of active dependence over diversification. Where the state lacks formal institutions to protect against rent seeking behavior and formation of certain interests, I argue that states are more likely to choose active dependence. This further explains why some downstream states do not diversify their energy supply when it would be in their interest to do so. In contrast, this also accounts for why states with relatively low levels of energy dependence often pursue a long-term strategy of

energy security via diversification. Because the energy trade is exogenous to politics in these states, strong actors, if present, do not have the ability to impose their interests on policy making (thus they are not energy veto players) if these interests are counter to overall state goals.

Figure 1: Observable Expectations by Country **Energy Veto Players**

	WEAK	STRONG		
		Potential for strong		
Formal Institutions	Cohesive energy security	lobbying but government		
	policy, long-term strategy of	retains control of policy		
	diversification.	making. Overall cohesive		
		energy security policy.		
	No contentious politics but high likelihood of rent seeking. Mixed cohesive energy security strategy, lack of diversification.	High potential for rent seeking behavior and state vulnerability. No cohesive energy security strategy and lack of diver-		
				sification.

Table 1: Observable Expectations

	Energy Veto Players			
	WEAK	STRONG		
Formal Institutions	Germany, Poland, France, Czech Republic, Austria	Lithuania, Italy		
	Hungary, Belarus	Ukraine, Bulgaria		

In sum, this theory puts forth that it is the presence of a policy gap between powerful local elites and state goals writ large combined with institutional and structural deficiencies that lead to an active dependence energy security strategy and therefore increased vulnerability as consumers.

III. INITIAL CONDITIONS

If state energy policy is dictated by a combination of weak formal rules and strong veto players with varying interests, how do we understand the origins of these conditions? Why are some states so vulnerable as consumers while others seemingly immune to powerful upstream states? While I argue that energy policy in Europe is formed through a combination of structural constraint and

powerful intermediary interests, it is crucial to first understand the institutional history that places energy dependent European states onto a specific causal path.

The Legacy of the Soviet Energy Trade

In many ways, energy trade and policy patterns in the European sphere originate from the way interests survived or reorganized following the collapse of the previous system: the Soviet Union and a divided Europe. Prior to the 1970s, despite having some of the largest oil and gas reserves in the world, the Soviet Union was a net importer of hydrocarbons. Guided by the fear of a potential energy shortage, Leonid Brezhnev, leader of the Communist Party of the Soviet Union at the time, launched a campaign to increase domestic production of natural gas by 50 percent over five years. The goal of the five-year plan was for natural gas to replace oil as the chief source of hard-currency income through the 1980s and was achieved by a massive 45 billion-ruble investment into new gas fields in Siberia.9 The program did lead to significant increases in production, but more importantly helped establish the energy sector as the Soviet Union's greatest link to the West. The huge growth in energy exports fostered the establishment of a number of important pipelines running from Soviet Russia to Europe that are still in use today, including the "Brotherhood" pipeline (1967) transecting Ukraine and Slovakia through to the Czech Republic, Germany, France, Switzerland, Austria, Hungary, Italy and the Balkans.

Along with the spectacular growth of energy trade with Europe as a whole, the increase in gas production also led to a systemic pattern of gas dependence for the Eastern bloc countries, the legacies of which are still in place today. Interestingly, although the Soviet goal was to encourage multilateral energy cooperation with the Eastern bloc states, this was difficult because member states could not agree on how to collaborate. Instead, Moscow's energy relations with Warsaw Pact states were characterized by flexible pricing so that the Soviets could discriminate bilaterally with individual states.¹⁰ This meant that Moscow could use its flexible pricing policy as a tool of foreign policy, punishing and rewarding its allies accordingly. In addition to flexible pricing, Moscow also used a number of other strategies such as the barter of energy supplies for transit services, pipeline construction and even for trade of consumer goods not available in the Soviet Union. As a result, the energy trade was extremely opaque and tied up with numerous other aspects of the economy and political system. Further, the nature of this relationship left a legacy of mistrust and distorted prices, with both sides claiming they were being exploited.11

Following the collapse of the Soviet Union, patterns of the energy trade went through a period of upheaval. Several countries involved in the gas trade and transit of gas now ceased to exist. One of the largest implications of the collapse of the gas trade and ensuing state energy policies was the breakup of the Soviet gas giant Mingazprom, which was divided up into national entities post-1990. While the Russian portion of Mingazprom was transformed into RAO Gazprom,

The chaos surrounding political reform post-1991 enabled the energy veto players not only to profit off of the state, but also to secure a foothold into governance.

dividing up the Soviet gas grid was an arduous process with large implications and residual effects. "Our gas distribution system is shaped in a way that makes it simply impossible to divide it according to the borders of CIS member nations," officials noted. "If we tried to carve up the system, even Russia with its enormous gas reserves, would simply not be able to meet its own gas needs."12 One example of this is the fact that parts of Southern Russia were supplied by gas pipelines that ran through eastern Ukraine. Further, Mingazprom had set up extensive gas storage facilities in Ukraine that were used for transmission and supply to former Warsaw Pact satellite states.

The way that eastern European and post-Soviet states dealt with the reestablishment of energy access in the early days of the 1990s has led to the energy security policy outcomes we see today. Although the specific causes of initial conditions in Ukraine will be discussed in greater depth, there are several key factors that can explain the presence of problematic energy veto players and patterns of weak formal institutions.

The Origins of Energy Veto Players

First, the emergence of energy veto players is highly linked to the patterns of the Soviet energy trade and how the new regimes managed the energy trade while rebuilding their economies and state apparatuses. In several states, particularly Belarus, Lithuania and Ukraine, any decisions on energy were made in Moscow as an extension of central planning rather than at the Union level.¹³ This meant that in practice, the leadership in these states did not have a welldeveloped republic-centered concept of energy security. Furthermore, the nature of economic development in the Soviet Union encouraged energy-poor states to adopt heavy industry-centered (and thus energy-intensive) development strategies, which were supported by heavy cross-subsidization despite the fact that it was highly inefficient.¹⁴ This explains why some states continued to develop according to a model based on cheap and available energy even after they no longer had ready access to the materials following the collapse of the Soviet Union. In states where this model was entrenched, there were large societal

implications in terms of employment in the industrial sector. Because most of the population was employed in heavy energy-intensive industrial sectors, it was nearly impossible to close inefficient factories and move to less energy-intensive development models after 1991.¹⁵ Across the cases in which this development strategy was already entrenched, energy veto players with a bias towards the status quo (active dependence) are more prevalent.

Not only are these veto players more likely to appear, but due to the nature of the employment sector, they are also more likely to have popular support. In extreme cases like in Ukraine, energy middlemen and other local oligarchs who support an active dependence policy also act as advocates for local workers whose livelihood depends on the continued operation of energy-intensive industries, especially in economically depressed areas.¹⁶ Any policies perceived as antiindustry or that would threaten the closure of large-scale industrial employers are discouraged by these veto players and by the populace that would be affected. In many states, the chaos surrounding political reform post-1991 enabled the energy veto players not only to profit off of the state, but also to secure a foothold into governance and perpetuate a cycle in which they could continue to profit from the old Soviet system.¹⁷ This is particularly the case in states where the energy sector was highly decentralized prior to the breakup of the Soviet Union (specifically Ukraine and Bulgaria) because it allowed regional players greater power and independence. Since energy veto players manipulate Soviet era inefficiencies, they often profit at the expense of state budgets and thus undermine the cohesion and implementation of national energy security strategy.

The ways in which energy veto players influence state policy mechanisms varies greatly case to case. Primarily however, energy veto players emerge in states that did not have full policy making apparatuses following the collapse of the Soviet Union. Many of these states lacked complete ministries with the sole task of energy management and instead had Soviet-era industrial networks that were stronger than any governmental bodies, policy, or regulatory body at the time. 18 Because of the nature of the Soviet economic system, this meant that many industrial and enterprise actors who depended directly on Moscow had little or no contact with the government of the state they worked in.¹⁹ In some cases, this direct link between Moscow and industry was much stronger than any government body. In the early chaotic days following the collapse of the Soviet Union, many of these actors were able to consolidate their interests to act as a powerful industrial lobby that had a huge role in the early policy making process. In the case of several post-Soviet states this lobby was able to block economic reforms in order to continue to access state subsidies, including energy subsidies.20

The Origins of Energy Endogeneity

Similarly, the way that states reorganized and managed privatization following the collapse of the Soviet Union is highly correlated to whether energy is endogenous to politics in some cases. Further, as noted above, the way that institutions develop around the energy trade and energy policy-making apparatus directly influences the ability of powerful actors to become energy veto players. In the European sphere, even similar countries can have a different economic structure because of how they privatize. While some states were able to manage privatization in a way that enabled strong institutions to command authority over governance and the energy sector, others only managed partial reform²¹ that enabled strong energy interest groups to become veto players.

The best way to understand how the institutional characteristics of a particular regime empowers veto players is to look at the timing of reforms. In cases like Germany, which already had a strong level of institutionalization around its energy sector prior to reunification, powerful energy actors were unable to become veto players. In contrast, in states in which there was a complete collapse of the regime like Ukraine, institutions developed at the same time as the energy sectors. This meant that as new states were creating an energy regime, sometimes for the first time, strong actors such as gas middlemen or firms with ties to the Soviet system were able to manipulate reforms in such a way that empowered themselves with policy-making veto power.

IV. Energy Policy and the Rise of the Middlemen: The Case of UKRAINE

Of all the Eastern European and former Soviet states, Ukraine best illustrates the mechanisms of the 'Strong Players, Weak Rules' theory that manifest in a policy of active dependence energy security policy. As mentioned above, the Soviet legacy of a lack of Ukrainian energy policy-making institutions, coupled with the high prevalence of energy intensive industries, set the stage for a lack of cohesion following independence. While some states were able to recover from these initial conditions, Ukraine was unable to make significant changes to its energy security policy until very recently.

Diversification Over Time

At the time of independence, Ukraine was heavily dependent on Russian commodities and was simultaneously one of the most energy-intensive states in the world. During the period between 1991-1995, at which time the Ukrainian economy was in free-fall, Ukraine's energy intensity increased by 30 percent.²² Ukraine's energy mix was also heavily unbalanced, so that in 1993, natural gas

comprised 43 percent of its total primary energy supply (TPES).²³ Although Russia continued to sell gas to Ukraine at heavily subsidized prices, Ukraine's dire economic situation meant that gas arrears quickly proliferated.²⁴ By 1994, Ukraine's current year arrears to Russia were \$1.9 billion.²⁵

Ukraine's first president Leonid Kravchuk, who was elected on a state and nation building platform, responded to the economic problems by providing cheap energy credits and state subsidies, which exacerbated inflation.²⁶ There was a further lack of serious, desperately needed energy sector reform under Ukraine's next president Leonid Kuchma. At the end of the 1990s and continuing to 2001, which coincided with Viktor Yushchenko's brief tenure as PM, there was a brief period of bold reforms aimed at reducing energy arrears and barter transactions that attract corrupt practices. However, as Balmaceda notes, "the privatization campaign, including the sale of major oil refineries to Russian companies, was plagued by problems of lack of transparency and insider dealings."²⁷

Despite a national desire for change following the Orange Revolution in 2004, Ukraine was again characterized by a lack of substantive reforms from the period of 2006-2008. Although there had been various attempts at increasing Ukraine's energy efficiency, by 2005, Ukraine consumed 73bcm of gas, an amount almost on par with Japan, Italy, Saudi Arabia or all African countries combined.²⁸ Further, the share of gas in Ukraine's total energy supply had increased more than 10 percent since the early 1990s, making it even more dependent on Russia as a single supplier. Even after the disastrous gas disputes with Russia's Gazprom in 2006 and 2009 over gas arrears and pricing, Ukraine was still unable to make serious reform of the collapsing barter system of gas trade.

In the wake of the 2006 crisis, Ukraine and Russia negotiated to separate the purchase of gas from the transit of gas. While it was a much-needed reform, the negotiations actually worsened Ukraine's energy security. Amongst the most problematic outcomes resulting from the renegotiation of 2006 was that the gas contract stipulated that RosUkrEnergo, a company created by Ukranian President Leonid Kuchma and his Russian counterpart at the time, Vladimir Putin, be the sole operator of Ukraine's gas imports, which meant that Ukraine was contractually bound to a single supplier with ties to Gazprom. Following the 2009 gas crisis however, Ukraine was able to make some much-needed changes that attempted to increase its energy security vis-à-vis Russia. First, Ukraine managed to do away with RosUkrEnergo's intermediary role, establishing a ten-year direct contract between Naftogaz Ukraine and Gazprom. However the contract enabled Gazprom, through a subsidiary, to market 25

percent of the total imported gas directly to industrial consumers.³⁰ Despite declaring several times since independence that it would seek to diversify supply source, Ukraine was largely unable to do so until 2015, when the EU mandated that European states install reverse flow capacity that would enable Ukraine to receive Russian gas flowing west from other European states.

Energy Veto Players

Why was Ukraine unable to formulate a diversification policy of energy security despite a desperate need? Largely, this inability to make a cohesive policy was due to the emergence of powerful energy veto players who were empowered by weak institutions and the fact that political institutions developed at the same time as the Ukrainian energy industry. In the mid 1990s, as Ukraine was developing its central political institutions, power cleavages were developing on a regional basis. Many former communist directors (many of whom now had gained either ownership or de-facto control of state industries) started to "merge their interests with the new regional economic structure and various groups within the party of power, forming durable regional based structures, which eventually became known as clans." 31

By the late 1990s, these groups (primarily Dnipropetrovsk, Donetsk and Kiev) had each developed power structures, including representation in the Ukrainian parliament. These veto groups became energy veto players because Ukraine's gas distribution system was highly dependent on regional distribution networks under the control of these clans. In 1997, PM Pavlo Lazarenko, himself a member of the Dnipropetrovsk clan, used his political powers to increase market control of his own gas supply company: Iednyi Enerhetychni Systeny Ukrainy (IESU). Through a restructuring of the gas sector in order to specifically benefit his own firm, IESU became the supplier for over half of the gas traded in Ukraine.³²

During the 1990s, most of the gas purchased by Ukraine was imported through the Russian company, Itera, a Gazprom subsidiary. Through Itera, Ukraine was paying absurdly low prices for gas, around \$4 per thousand cubic meters. While the Ukrainian state usually paid around \$50-80 (still well below the European market level), Itera chose to receive only a third of that. The rest, about \$2 billion per year for each side, was divided between Ukrainian and Russian gas middlemen. These middlemen could then sell the gas to the European market at an average rate of \$110/thousand cubic meters, which even allowing for \$10 in bribes, could have generated another \$360 million. One of the most prominent of these gas middlemen, Dmitry Firtash, rose to prominence in the early 2000s where he made billions buying gas from the Russian state

and re-selling it to his home country of Ukraine at inflated prices while also becoming a key ally of Ukrainian president Viktor Yanukovich³⁴.

Many of these gas middlemen, who had ties to state institutions, also had long standing Soviet-era ties to now-Russian businesses, particularly in the energy sector. Because they were able to make exorbitant profits by maintaining relationships with Russian businesses it was against their interest to support any real reform of the energy sector that might reduce their access to rents. Throughout the 1990s and 2000s, there was a long-standing pattern of energy veto players making alliances within Gazprom, to increase personal benefit at the expense of the state.³⁵ Further exacerbating the problem was the fact that Ukraine's policy of subsidizing consumer energy prices meant that consumers did not feel the growing costs of its disastrous energy policy. It also made any diversification policies, which are painful in the short term, hard to sell to consumers who had grown used to some of the lowest residential gas and electricity rates among former Soviet countries.

At the same time, Ukrainian politicians were fostering a close relationship with Russia across a host of issues only tangentially related to energy. After several years of negotiation, Russia and Ukraine signed a friendship treaty stressing political and economic cooperation between the two states, as well as a joint statement on the Black Sea Fleet, which permitted Russia to operate on Ukrainian territory. The agreement outlined a 20-year lease in exchange for a reported \$100 million per year in rent that was covered by partially offsetting Ukrainian gas debts to Russia. In 2008, Viktor Yushchenko decreed as part of his package of reforms that Ukraine would not renew the lease upon its expiry in 2017. However, less than two years later, re-installed President Viktor Yanukovych agreed to extend Russia's lease for 25 years, until 2042 at least. This announcement followed a meeting with then Russian president Dmitri Medvedev, who had offered Ukraine a discount on gas bills: slashing the price per thousand bcm by \$100 from its current rate of \$330, with a further 30 percent discount if oil prices fell. Price per discount if oil prices fell.

Institutions

Why were these groups allowed to grow so powerful that they prevented the Ukrainian state from enacting the cohesive diversification policy it so desperately needed? Primarily due to the prevalence of weak formal institutions that might have been able to prevent powerful actors from becoming energy veto players at all. In the Ukrainian case, there was no preexisting domestic institution overseeing the energy sector: the entire Soviet system had been based in Moscow. This meant that following independence, Ukraine was setting up its government

and power structures at the same time as it was developing its energy sector. As Joel Hellman notes in his book "Winners Take All: The Politics of Partial Reform" these actors benefited from partial reform that empowered and sustained rent seeking.³⁹

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During the Kuchma era, the Ukrainian system was set up with an extremely powerful president paired with a weak and inefficient government. Because regional cleavages were forming at the same time, this led to a situation in which the predominant rifts between political parties was reduced to a struggle between clan organizations over access to rent seeking opportunities.⁴⁰ Further institutional flaws, such as the fact that members of the Rada (the Ukrainian parliament) were immune from criminal prosecution, made participating in the body an attractive prospect for businessmen with ties to illegal dealings. This helped solidify the institution as a means for furthering their interests.⁴¹

Regional power bases that had corporate interest in the energy sector, as well as direct representation in the Rada, empowered these groups to become veto players and forestall any serious change in energy security policy. When Yulia Tymoshenko was appointed deputy prime minister for fuel and the energy sector in the cabinet of Viktor Yushchenko she sought to make sweeping reforms based around reducing corruption. However, the already entrenched energy veto players opposed these goals and helped to organize her removal from office in 2001.⁴² Even after the Orange Revolution there was little improvement over transparency of policy-making or the quality of institutions. Up until the removal of President Viktor Yanukovych in 2014, the cycle of ineffectual reforms and state capture by powerful energy veto players continued, resulting in a continuation of the active dependence energy security strategy even after a number of energy supply crises.

V. Conclusion

Although diversification is the cornerstone of energy security, many states, even those that are highly dependent on a single source, remain unable to accomplish this. Instead, we observe similarly dependent states embarking on wildly different energy security paths. States like Ukraine, who have faced a number of highly publicized energy supply crises, are often unable to make the reforms necessary to diversify their strategies. I argue that weak domestic formal institutions enable actors with interests in the energy sector to become energy veto players

that then forestall reform and promote a strategy of active dependence that gives them access to rents. In these cases, energy is endogenous to politics.

Ukraine is a case in which all of the variables that lead to a policy of active dependence are present: because of the Soviet legacy, political institutions and the energy sector developed simultaneously, enabling powerful actors to become veto players. When energy is endogenous to politics as in the case of Ukraine, it is difficult to make reforms that might be painful to the polity in the short term (increase consumer prices etc.), but necessary for the long-term achievement of energy security. While recent events have brought about radical change within the government, it remains to be seen whether that is enough to overcome the (formal and informal) institutional barriers to energy security reform.

Energy security policy and its ties with the international energy trade are an increasingly crucial aspect of the global landscape. Elucidating the origins of state policy that governs the international commodity trade has important implications for international political economy, alliance politics and regional security. Further investigation into the conditions under which states choose their energy security policy should be conducted using a broad set of cases as well as in-depth case studies.

Notes

- ¹ Linas Jegelevicius, "Lithuania has Become the EU's Good Pupil in Energy Policy," EurActive (November 11, 2014).
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