



COMMITTEE
ON
INTERNATIONAL
RELATIONS
THE UNIVERSITY OF CHICAGO

The University of Chicago

**Fighting with Dollars and Energy: The Coercive Strategies of Weaponized
Interdependence**

By Ethan Edwards

July 2022

A paper submitted in partial fulfillment of the requirements for the Master of Arts degree in the
Master of Arts Program in the Committee on International Relations

Faculty Advisor: Matthias Staisch

Preceptor: Burcu Pinar Alakoc

Abstract: The war in Ukraine has sparked an unprecedented conflict between the Russian Federation and both the United States and European Union within global networks. In this conflict, the Russians have used its hold over the energy trade to withhold natural gas imports to the European Union. The United States and European Union have used their hold over international finance to expel Russia from the SWIFT system. Instead of sending soldiers, the respective sides have sent the dollar and natural resources to do the fighting. In this thesis, I create a dynamic conceptual framework that merges network analytic conceptions of power with coercive strategy. In this framework, the strategies of both the coercer and the coerced are explained. I find that these strategies of coercion are generalizable beyond the actors associated with the war in Ukraine and that 1) states opt for offensive strategies in networks where they are the dominant power, and 2) these coercive strategies can be used both within and across multiple networks.

Introduction

On February 24, 2022, Russian President Vladimir Putin announced a special military operation in Ukraine. (Lister et al.) Ukrainians awoke to find Russian missiles flying overhead followed by soldiers marching into their towns. War had begun. And while Ukraine fiercely resisted the Russian invasion, many were left wondering: where is the West? On February 26, 2022, the Russian people awoke to find that their currency was worth less than one cent (CBS News). The barrage of crippling sanctions and expulsion from the international financial transaction (SWIFT) system left the Russian economy in shambles with many estimating an economic contraction around or beyond 10% – effectively undoing all Russian growth since the collapse of the Soviet Union (Kim; Tan). Here was where the West made its response. While its soldiers were not fighting on the plains of eastern Ukraine or in the cities of Kyiv and Mariupol, its weapons and supplies were being sent to the Ukrainian military and its dollars were doing the fighting within the globalized financial and trade networks.

While Putin’s War in Ukraine demonstrates the characteristics of most interstate conflicts, the West’s response does not. This notable departure from the historical norm signifies that there are more dimensions than previously fought in modern conflicts. Recent international relations literature suggests that these dimensions are brought out primarily by the rise of private globalized networks – of which the SWIFT system is a part. Through these networks, the world is now connected in various, complex ways and states can leverage their relative advantages to pursue power. In the words of Rosa Brooks and Thomas Wright, everything can be a weapon and states who are able to use them can employ “all measures short of war” (Brooks qtd. in Drezner et al.; Wright).

Employing all measures short of war is what the West did. And this makes sense. Both the Russian Federation and many Western countries are nuclear powers and open conflict risks nuclear war (Friedman). So, the West turned to the next best tool at its disposal: economic networks. Historical examples of economic warfare include the closure of trade routes, blockades, and sanctions (Shambaugh). And these examples have been analyzed and studied in international relations literature, particularly in the international political economy subfield. Despite this, the outright expulsion of a state from an economic network is a rather unique occurrence and has substantial implications for the field. However, much of the literature focuses on the relationship between interdependence and the likelihood armed conflict, not on the use of interdependence as a weapon – which has often been ignored save by a few scholars. If anything, this instance of economic warfare forces practitioner and scholar alike to come to terms with both international political economy and security studies in a new way.

Partial expulsion from the SWIFT system shows that networks can be weaponized. And although this recent occurrence is a notable example of a state weaponizing a network, it is not entirely new. In fact, many countries have been weaponizing finance, trade, refugee flows, internet services, technology, and global trade infrastructure to pursue their political goals (Leonard). Notable examples include former president Trump’s “Maximum Pressure” campaign on Iran (Ip; Dages) and Russia’s suspension of natural gas shipments to Europe in 2006 and 2009 (Kramer; Pifer). These instances of weaponization lead to the following question: why does a state weaponize interdependence? A state weaponizes interdependence to achieve its policy goals.

This answer seems rather simple. However, applying this question to the Ukraine crisis yields interesting results because 1) both the western powers and the Russian Federation have

weaponized their respective networks, 2) both sides pursued distinct policy goals in doing so, and 3) the success of this weaponization varied. The United States (US) and its allies expelled Russia from the SWIFT system, and Russia threatened and later withheld its energy exports to the European Union (EU). At first glance, it seems that both sides are using the same means – their weaponized networks – for different ends. To explain this variation, I will use theories on economic interdependence and its weaponization to develop a theoretical framework and examine Putin’s War in Ukraine. For this purpose, I will review existing interdependence theories in the first section, synthesize a theoretical framework and heuristic in the second section, and create a research methodology and apply that heuristic to the Ukraine crisis in the third and fourth sections. In doing so, I will show that weaponized networks can be used either to successfully extract some political concession or to maintain the status quo.

Literature Review

Traditional literature on international economic relations has tended to focus on economic interdependency’s impact on the probability of conflict and the use of economic statecraft to pursue national goals. However, little attention has been paid to the leveraging of economic interdependence as a tool of statecraft. Therefore, this review provides a chronology of interdependence literature and shows that the nature of coercion has changed. It can no longer be thought of in dyadic terms but in network terms. My work shows that the coercive environment is much more dynamic. Now, multiple actors – each with its own unique advantages derived from its network position – are involved in geopolitical struggles. The rest of my work found in the theory and case study sections encompasses my contribution to the literature. I link the ends of coercion to its means. In so doing, I create a strategic framework with which to think about coercion both within and across networks.

Evolution of Interdependence Literature

Much of the scholarly debate on interdependence revolves around whether it decreases or increases the probability of armed conflict. Many scholars fall into one of two camps: the liberals and the realists. Dale Copeland summarizes the debate nicely; while both sides share a causal logic, they differ in its effect. Liberals emphasize the importance of trade and shared values. They argue that high levels of economic interdependence increase both the costs and risks of aggression, thereby lowering the chances of war. A dependent state will be less likely to initiate a conflict because it risks economic disruption (Copeland 5-13). This line of thinking has been supported by scholars who found that there was a reduced probability of military conflict among democratic and economically interdependent powers (Oneal and Russett; Oneal et al.).

The realists tend to emphasize the salience of relative power in interstate relations. They argue that high levels of interdependence cause an exploitable dependency. This rings especially true when states rely on critical natural resources such as oil. Any disruptions to these resources could cripple a state's economy. Kenneth Waltz argues that the inherent anarchic structure of the international system incentivizes aggressive self-sufficiency to escape dependency. John Mearsheimer argues that states who fear disruptions from dependency try to mitigate risk by establishing control over their resource flows and trading relationships which causes greater security competition (Copeland 5-13). This line of thought has been supported by scholars who found that interdependence incentivized aggression (Uchitel qtd. in Mastaduno) and did not deter conflict (Blanchard and Ripsman).

Despite the differences between the two sides, both have successfully explained state behavior in differing circumstances. This led scholars to question when and why do states act according to realist or liberal theory. This commitment to understanding state behavior under

certain conditions has allowed for interdependency literature to move beyond the liberal-realist debate. A notable example of this is Paul Papayoanou's attempt to synthesize the two schools of thought. By combining economic liberalism with realism's balance of power theory, he argued that differing patterns of trade and levels of economic interdependence could explain the variation in state behavior. Higher levels of interdependence among states who did not seek to change the status quo would encourage peace. However, economic interdependence between status quo and threatening states would lead to weaker balancing and conciliatory policies while incentivizing aggression by revisionist powers (Papayoanou). In essence, Papayoanou sought to take both the security and economic concerns of states into account.

The attempt to holistically explain state behavior, however, requires understanding the broader context of economic relations and their influence on state behavior. Katherine Barbieri posited that low to moderate levels of interdependence reduced the probability of militarized disputes, although both extreme symmetric and asymmetric interdependence had the greatest potential for increasing the probability of armed conflict (Barbieri). This suggests that the benign effect interdependence has its limits. Furthermore, Gartzke and Westerwinter theorized that the presence of interdependency, asymmetry, and multipolarity could explain the variation in state behavior. To that end, interdependence could be a substitute or deterrent of militarized conflict. They argue that interdependence decreases the chances of militarized conflict while increasing the chances of non-militarized ones. The presence of asymmetric economic ties, however, decreases the inhibiting effect of trade. Finally, the presence of multilateral trade regimes can either soften or enhance the effects of asymmetry and bilateral interdependence on peace (Gartzke and Westerwinter). Barbieri as well as Gartzke and Westerwinter's pieces indicate a shift in the interdependence literature. If anything, this shift parallels developments in

international relations, namely the rise of multilateral institutions and deep integration between states.

The idea that integration had a profound impact on interstate relations was considered by Keohane and Nye who coined the term complex interdependence (730). The idea of complex interdependence indicates that a shift in focus from bilateral and dyadic relationships to both systemic structures and institutional relationships was required to adequately explain state behavior. Keohane and Nye's synthesis incorporated both realist and neorealist analytical thought to liberal conceptions of interdependence (728). What emerged was an idealized model that bypassed realism's understanding of power (738).

In other words, it kept with liberal thought by assuming that there was a hierarchy among states and a semblance of order in the international system. And yet, it considered asymmetric dependency between states as a resource of power (728). The emphasis on asymmetric dependency was furthered when the authors suggested that the efficacy of force was diminished. Keohane and Nye argued that the risk of nuclear war, widespread resistance to conflict from poorer and weaker nations, the uncertain and negative impact of conflict on economic health, and domestic opposition to violence all increased the costs to using force (727). As a result, their notion of complex interdependence would have three major characteristics. The first being that state policy goal are subject to trade-offs. The second being that the range of political tools at the state's disposal expands with the different types of integration between societies. And the final being that military force is largely irrelevant (737-738). In essence, Keohane and Nye's argument is liberal. But what is interesting is that they admitted that their conception of complex interdependence is an idealized and type and went so far as to question its relevance to world politics during their time.

It may be safe to say that it has been relevant to world politics. Since Keohane and Nye's conceptualization of complex interdependence, successive waves of scholars have examined state behavior and interstate relations with systems being the unit of analysis. And this is fitting given the rise of globalization. What has changed, however, is the relevance of militarized force. While Keohane and Nye argued that the use of force is irrelevant, later scholars have argued the opposite. Even within interdependent systems, military force underscores interstate relations because states may focus on relative gains. Regardless of the presence of economic competition and cooperation, states may use military power to pursue their goals (Rana).

Despite the liberals' claims, it seems that the use of force still has its place in international relations. However, Keohane and Nye's conceptualization of force carries with it a new distinction. It can be argued that when they linked asymmetric dependence to power, they expanded the definition of force into military and non-military (and potentially economic) uses. Now this link is not entirely new, but what makes Keohane and Nye unique is their emphasis on state action within multilateral global institutions. It signifies that many scholars of international relations were focusing on interdependence between numerous actors.

To that end, many scholars have recently included network analysis to explain the effects of institutions and complex interdependence. This is both fitting and evident given the rise of "hub-and-spoke" models that examine the internet, global communication, and financial networks (Drezner et al. 8, 21-26). The emphasis on network-based approaches to analysis and theory requires both an adequate definition of a network and explanation of its impact on state behavior. At a basic level, a network is the product of the relationships between a group of interdependent actors, called nodes. Going a step further, network theory claims that an actor's behavior and function can be explained by its position within the group (Bevir). Within

international relations, networks are a mode of organization that is distinct from markets and hierarchies (Hafner-Burton et al. 559). Network analysis can explain the processes that permit or inhibit certain behaviors, and it provides an alternative understanding of power.

Hafner-Burton et al. claim that networks have different power structures based off a node's connection with other nodes. Connections can have multiple characteristics; they can be binary or plurilateral, symmetrical or asymmetrical, and positive or negative. Therefore, network power is the result of the number and type of connections between nodes, called centrality, and the various subgroups of nodes. Centrality can be obtained by degree (the number of connections a node has), closeness (the strength of a node's connections), and betweenness (the brokerage power of nodes). Centrality and subgroups provide structural explanations for power; however, power can be defined in numerous ways. Social power allows well-connected and central nodes to access resources, leverage influence, and exclude other nodes (563-565, 569-573).

In addition, Hafner-Burton et al. argue that power can come from betweenness. Betweenness occurs when one node acts as a link between other actors. This allows the central node to act as a broker and gain leverage by opening or restricting access between actors. Lastly, the authors claim that states can access exit power. Exit power is based on a node's ability to exit or decouple itself from the network. Sufficient exit power enables a node to leave or credibly threaten to leave a network when facing coercion. This power is usually exercised by less connected nodes. Regardless of the type of power acquired and exercised by a node, the authors claim that network-based power can be enhanced and exploited. Moreover, they argue that different types of network power are fungible and can be used to offset other types of power (573).

The idea that network structure confers advantages onto specific actors was also suggested by Thomas Oatley et al. They argued that the global financial system was in fact a network whose hierarchical structure could shape power relations and impact power persistence (133). In this vein, other scholars such as Stacie Goddard used network analysis to explain how institutions influence state behavior. Although she focused exclusively on revisionist behavior, her work provided some fundamental insights. The first being that a state's relative position within an institutional network impacts the material and cultural resources at its disposal. And the second being that a state would tailor its revisionist strategy depending on its relative position. Consequently, the literature implies that not all networks share the same structure. Moreover, the presence of hierarchies suggests 1) that both symmetric and asymmetric relationships can exist and 2) that different positions within the network confer different advantages (Goddard 763). Therefore, states in critical positions can increase transaction costs (Judge 573) or restrict another's access entirely (Oatley et al. 133). The network therefore provides considerable room for states to strategically maneuver and extract relative gains to the detriment of others (Cohen and Germain, 111, 125).

The inclusion of network analysis and theory in international relations research allows for greater flexibility in explaining state behavior. And it reflects broader trends in the development of interdependence literature. Over time, interdependence literature has increased in complexity as evidenced in the shift from a focus on bilateral relationships to systemic and network-based ones. The rise of network literature means that interdependency is no longer confined to trade alone, but also to communication, information, and financial relationships. Increased connections between countries implies that there are more political tools at a government's disposal. However, it also means that there are more theaters of competition between states. Therefore, it

seems that the effects of networks may be positive or negative depending on the circumstances. On one hand, networks allow for increased interdependence and presumably greater risks and costs associated with aggression. But on the other hand, a network's hierarchical structure gives well-positioned actors special advantages that can be exploited. Actors can leverage their positions within the network to escape from hostile asymmetric relationships, exploit them, or do both.

Theory

Network theory furthered the liberal thought process on interdependence by acknowledging that it can have both positive and negative effects on interstate conflict and cooperation. However, it also acknowledged that asymmetric relationships could give some states power over others. Despite this, the theories have done little to examine how interdependence can be used as a tool of economic statecraft, which is unsurprising given that it is outside the scope of the liberal-realist debate. Most of the research on economic statecraft relates to the efficacy of the disruption of trade through sanctions (Pape 92) And although economic coercion has been practiced for millennia, (with documented cases going as far back as the Peloponnesian War) very little has been written about the subject (Shambaugh). Consequently, Albert Hirschman's theory of coercion through trade in his book, *National Power and the Structure of Foreign Trade*, stands out as one of the first and most advanced (Wagner 461).

The centerpiece of Hirschman's theory relies upon existing dyadic relationships between countries and that commerce can be used as an alternative to war (Hirschman 13-15). His argument proceeds from the logical premise that a state reliant on trade will be harmed if the

trading relationship is suddenly disrupted. Therefore, the ability to disrupt the trading relationship provides power. However, this comes with the caveat that the loss of trade will harm one trade partner far more than it will harm the other. This means that the relationship between the two countries is asymmetric and that the coerced state is now dependent on the coercer. Therefore, both the presence of an asymmetric relationship and the ability to disrupt it grants power. The coercer can exploit asymmetric dependences in pursuit of two policies: the supply and the influence effects. The supply effect guaranteed a stockpile or continued access to critical resources for the country's armed forces. And the influence effect allows the coercer to gain political and economy power by creating monopolistic trading relationships, arbitrarily increase the price of its goods, create vested interest groups, and establish political influence and obtain policy concessions. All of this was to be accomplished first by providing favorable terms of trade to trading partners so that concessions or secure supplies can be extracted later (14-16, 34-35).

It must be noted that there is a distinction between economic dependence and interdependence in name only. While Hirschman may not have used the term interdependence, the idea that two countries enjoyed the gains of trade was central to his theory. Moreover, the idea that the coercer state experiences a level of risk and therefore dependence upon the coerced state is supported by the presence of the supply effect in his calculus. The main difference in Hirschman's piece is that the coercer state sought out countries which did not pose a threat to its national security. For clarity, the term asymmetric interdependence will be used.

The exploitation of asymmetric economic interdependence in Hirschman's theory raised concerns regarding the conditions of exploitation that subsequent authors attempted to address. Much of the literature focused on the increasing complexity of interdependence and its effects on

the conditions that allow for attempted coercion, its successful use, and national responses to interdependence.

These concerns will be addressed here beginning with the conditions allowing for exploitation. At a fundamental level, the presence of asymmetry does not indicate that a state is necessarily at risk, nor does it indicate that one party is at an inherent disadvantage. Even then, a country who enjoys the asymmetric interdependence may not be able to leverage it (Wagner 461). Rather, the gains from trade are mutually beneficial to some degree. To this point, the relationship could be benign politically even though one country commands a substantial economic advantage. If anything, the utility – or gains from trade – may be subjective depending on the intentions of each trading partner. Even then, the attempted exploitation of interdependence, or threat thereof, for political gain indicates that 1) there must be unexploited bargaining power in the relationship, 2) that the party demanding the concession could demand better terms in the relationship, and 3) that the use of economic resources for political concessions make both the coercer and coerced better off than if the relationship itself ended (481).

Explaining the successful use of economic coercion has been difficult to say the least. Much of the scholarship has focused on the use of sanctions with some thinkers such as Robert Pape arguing that they do not work at all when used to pursue major foreign policy goals. He suggests that much of the existing scholarship concludes that sanctions are less effective than military force, and that they should instead be used for minor issues and must not attack the target's territory, international and domestic security, and wealth (Pape 92). In addition, Pape argues that sanctions would presumably be effective against countries who are completely reliant on the sanctioning power. Despite this, he suggests that sanctions could be employed in concert

with hard power (109-110). In a similar vein, Kirshner uses conflict expectations to build upon Daniel Drezner's theory to explain that sanctions are common but less effective between opponents while it is less common but more effective between allies (160). This allowed other authors to surmise that dependency and additional factors outside the trading relationship better explains successful exploitation (Shambaugh IV, 559).

The state responses to economic coercion have evolved considering globalized interdependence and are now treated as national security issues. While globalization has had its benefits, many have realized that new threats have emerged specifically in the disruption of trade and investment, international law, migration, global transportation networks, and in internet domains. This has led the European Council of Foreign Relations to coin the term: connectivity wars. The use of sanctions, visa bans, asset freezes, and financial warfare (particularly from the US after 9/11) have proven this point. Governments now must walk the geopolitical tightrope as they try to balance the positive and negative effects of interdependence (Leonard 13-15). However, increasing security concerns have led to states focusing on obtaining economic independence to mitigate risk (Leonard and Franke; Leonard). Many now fear that disruptions in the economy, international institutions, and global infrastructure in this era of coercion will cause the fracturing of the current world order (Leonard and Franke; Leonard).

Economic coercion can now occur on an unprecedented scale with network-based interdependence allowing well-placed states to pursue power in a way that is reminiscent of Albert Hirschman's theory. However, the developments in coercive instruments available to governments call for a novel conceptualization of interdependence. Abraham Newman and Henry Farrell have answered it with their recent conceptualization of weaponized interdependence in their book *The Uses and Abuses of Weaponized Interdependence*. While the

term is new, it seeks to explain established practices in a logical and coherent way (Drezner et al. 9-10, 12).

Basing their work on network theory, market power, and asymmetric interdependence, the authors argue that the architecture of specific globalized networks have not diffused power but aggregated it. This latent power can be utilized by nodes who occupy the central hub within the network. But states can only utilize this power when they have sufficient domestic institutional control over the key points of a network's architecture (48-51). What is interesting is that the networks generally consist of private actors, such as businesses, that exist apart from the state (9-10). And like Hirschman's theory, these relationships exist prior to their weaponization. In some cases, the state may not realize it has dominance over a network, may not develop the sufficient institutional control to do so, or simply may not choose to exploit it. However, when it chooses to do so, the same factors that govern the success of prior forms of statecraft still apply (10-11). Furthermore, when states do choose to weaponize interdependence, they leverage the following two effects: the chokepoint and the panopticon effect. The chokepoint effect is utilized by a central actor (or actors) who control the network's key infrastructure and can restrict or expel another actor from the network. The panopticon effect ensures that the central actor can monitor the actions of others within the system. In other words, the panopticon effect allows the central actor unparalleled access to the information of other states (23-30).

Outside of sanctions literature, the scholarship on interdependence has usually ignored the topic of weaponization in favor of examining its impact on the probability of conflict. In an ironic twist, interdependence is now being used as a tool to wage geopolitical conflicts. While the scholarship is now addressing weaponized interdependence, it has not addressed its uses. To put it differently, the literature has acknowledged that interdependence can be weaponized to

pursue political ends, yet it does not describe what those political ends are. Therefore, my work will be furthering the literature in explaining some of the political uses of weaponized interdependence.

To that end, I will look to the past and give special attention to both Albert Hirschman's supply and influence effects and Farrell and Newman's panopticon and chokepoint effects. If taken separately, Hirschman's framework can only explain *the ends* to which a state may work towards while Farrell and Newman's explains the *means* that they utilize. Therefore, combining the two frameworks will sufficiently explain state goals and behavior. And this combined framework will be discussed in the next section.

The theoretical framework I created includes elements of Hirschman's and Farrell and Newman's theories. Hirschman's framework takes trade as the means to the end of power. This makes intuitive sense given that his piece focuses on the pre-World War II German trading regime which in his words, "capitalized on one of [the international economic system's] potentialities or side effects." (Hirschman vi-vii). However, there are other tools of economic statecraft such as investment and financial management that can be used to pursue power. And so, Hirschman's analysis can include alternative statecraft tools. Hirschman himself later acknowledged that foreign aid and capital flows supplanted trade as the main arena for political power in the postwar era (v). Farrell and Newman focus on how a network's structure allows a country to utilize the panopticon and chokepoint effects, but they do not discuss what goals these effects are used for. Their argument that hubs can leverage network structure aligns well with Hirschman's description of Germany's exploitation of the international economic structure (Drezner et al., 48). In this sense, Hirschman focuses on the ends of exploitation and Farrell and Newman focus on the means of exploitation.

These theories share certain core assumptions. The first assumption is that states take part in economic networks. The second is that a state can be harmed if their economic relationships within the network are disrupted by another. This means that the ability to disrupt economic relationships provides a state with power. The third assumption is that relationships within the network, and the network itself, can be asymmetric and exploited. The fourth is that states use their positions within the network to increase their power through the supply and influence effects. To that end, states can utilize their domestic institutional control over the networks to increase their economic access to other nodes and realize the supply effect. Moreover, states realize the influence effect by employing both the panopticon and chokepoint effects.

The combined framework supports the notion that weaponized interdependence can be used to deter and to compel another state within the network. This infers that the state may threaten, but not employ, weaponized interdependence, which is corroborated by other scholars such as Wagner and Pape as well as policy practitioners like Presidents Biden and Putin. To examine the ability to deter and to compel, I will use two established terms within international relations literature: deterrence and compellence.

The terms compellence and deterrence allows the model to identify the way weaponized interdependence is used. For reference, deterrence is defined as a “strategy under which one power uses the threat of reprisal effectively to preclude an attack from an adversary power.” (Britannica, Appeasement). While the definition of deterrence is straightforward, the effect of deterrence on political action is not. The attempted use of deterrence may cause the target to hesitate acting or to respond without passing certain political threshold. For the purposes of this paper, the latter understanding of deterrence will be used. Compellence is defined by Thomas Schelling as, “the ability of one state to coerce another state into action, usually by threatening

punishment.” (Britannica). Compellence is either diplomatic or demonstrative. Diplomatic compellence requires the use of threats and a show of force while demonstrative compellence requires the limited use of force on another actor to coerce the target (Britannica). In summary, where deterrence promises reprisal to stop some act, compellence promises reprisal if no action is taken. The notions of deterrence and compellence imply that weaponized interdependence can be use threatened or inflicted. Consequently, I will divide states into two categories: those who threaten and those who inflict it.

While compellence and deterrence allow the model to examine how states threaten weaponized interdependence, they do not explain the state’s goal. Hirschman argued that a state may pursue political power through the influence effect. I argue that the influence effect could be used defensively to maintain its position or offensively to change the geopolitical status quo. Both are valid pursuits. A state may work to preserve the political status quo because it serves its interests while another state may change the political order to pursue its goals. To account for this, I will divide states into offensive and defensive categories.

The logical implications of the combined framework form the basis of the theory and analysis of state behavior. In this case, the combined framework follows established practices of weaponized interdependence. A state’s behavior can be categorized in one-of-four ways and is mapped to the two-by-two matrix shown in Figure 1 below. While compellence can be either demonstrative or diplomatic, I do not differentiate between the two in the heuristic for the sake of simplicity. Moreover, I have decided to list only the chokepoint effect and the influence effect on the heuristic. Although there are documented uses of the supply and panopticon effects, these are outside the scope of this paper. States can fall into one-of-four quadrants. Quadrant I describes a state that threatens weaponized interdependence to pursue a deterrence strategy.

Quadrant II describes a state that threatens weaponized interdependence for a compellence strategy. Quadrant III describes a state that inflicts weaponized interdependence for a defensive strategy. Quadrant IV describes a state that inflicts weaponized interdependence offensively to extract some gain or concession.

The theoretical framework gives rise to multiple expectations of state behavior regarding the war in Ukraine. However, these expectations are best understood considering the situation's context and development over time. Because of this, one actor may initially use deterrence and later compellence if need be. For clarity, the theory and the heuristic will be used to evaluate state behavior from December 2021 to July 2022.

		Chokepoint Effect	
		Defense	Offense
Influence Effect	Threatens WI	Quadrant I Threatens WI for deterrence	Quadrant II Threatens WI for compellence
	Inflicts WI	Quadrant III Defensive use of WI for protection	Quadrant IV Offensive use of WI for concessions

(Figure 1)

The argument presupposes that the respective countries are the dominant actors within their networks; with Russia being the dominant actor in Europe's energy network, and the EU and US being dominant in international finance. Russia is also the revisionist actor while the western powers are status quo-seeking actors. This makes sense because Russia's invasion of

Ukraine is considered an act of revisionism as it undermines both Ukraine's territorial sovereignty and flagrantly violates established norms (Bellinger III).

Given the US and the EU's dominance over international financial networks and classification as status quo-seeking states, it is logical that they would seek to maintain or reinstate the pre-2022 invasion status quo. This provides the first expectation:

E1: The U.S. and the E.U. would threaten weaponized interdependence to deter Russia from invading Ukraine.

Russia may threaten to use weaponized interdependence to deter European countries from intervening in its invasion. Should deterrence fail, Russia may employ the chokepoint effect to compel European countries to limit or altogether cease their intervention on behalf of Ukraine. This gives rise to the second and third expectations.

E2: Russia will employ weaponized interdependence to deter intervention in its invasion of Ukraine.

E3: Should deterrence fail, Russia will employ weaponized interdependence to compel a change in the EU's intervention policy.

However, the EU is not monolithic. It logically follows that more dependent countries should have a weaker reaction to Russia and vice versa. This leads to the fourth expectation:

E4: The efficacy of Russia's weaponized interdependence in Europe would vary by the target's dependence on Russian energy.

It seems unlikely that the US and the EU would use deterrence to pursue their geopolitical objectives. Although it was originally rumored that the US and the EU would expel Russia from

SWIFT, this idea was rejected by the allies save for Latvia (Faulconbridge). While President Biden warned that Russia would suffer sanctions, “like none [Vladimir Putin had] ever seen,” he maintained that ejection from SWIFT was not on the table. This shows that there was no consensus among the U.S. and its allies regarding this action (Prince). Since ejection from SWIFT occurred after the invasion, the US and the EU are expected to fall under the offensive category.

Overall, the theoretical framework uses weaponized interdependence to evaluate state political objectives. According to the heuristic, it appears that the western powers will fall under Quadrant I or Quadrant IV while Russia may fall under Quadrants II and IV. The heuristic will be applied, and the expectations will be evaluated in the case study section. However, I must first enumerate how I will evaluate the expectations and the heuristic in the methodology section.

Methodology

The case selection is particularly important because it introduces variety into the literature. Where Farrell and Newman only examine the coercer who holds all the power, I examine both the coercer and the coerced. In the case of the Ukraine crisis, the leverage derived from asymmetric interdependence is in Russia’s favor in the energy network but is in America and Europe’s favor in the financial messaging network. The widespread use of weaponized interdependence surrounding the Russian invasion of Ukraine allows for a broad evaluation of the theoretical framework. The evaluation of this theory is deductive and utilizes both qualitative and statistical data. Using statistical information from Eurostat, news articles, published research papers, and official government statements, I will construct a narrative timeline of events spanning from 2014 to June 2022. This narrative arc will provide context for the war and will

follow developments in the US, the EU, and Russia. It will also allow for an in-depth analysis of state behavior utilizing the heuristic.

The statistical information describes the energy dependency of European countries as a percentage of their total energy mix. The data depicts the individual countries' level of energy dependency and is used to evaluate their responses to Russian weaponized interdependence. The news articles, research papers, and government statements will be used to depict political responses over the seven-month period. However, it must be noted that the EU is not monolithic – multiple states may have conflicting policy interests and outlooks. And considering that many EU states are former Soviet Republics, they may have a different, more aggressive stance on the Russian energy and foreign policy. To account for this variation, I will examine the policies of France, Italy, Germany, Hungary, the Baltic states (Lithuania, Estonia, and Latvia), and Poland.

The responses of the US and EU members will be evaluated across four criteria: 1) the amount of aid given to Ukraine as a percent of GDP, 2) political rhetoric, 3) political cooperation, and 4) independent government policies. These criteria serve multiple purposes. They identify which quadrants on the heuristic the countries fall in and gauge their support for Ukraine. And they serve as indicators for the success of Russian weaponized interdependence. To that end, the amount of aid given is a quantitative and verifiable measure of political support for Ukraine while political rhetoric, cooperation, and policies evaluate that political support in response to coercion.

The case study will be divided into four sections. Sections one and two provide the situational context for the analysis in section three. Section one describes the SWIFT network and explains each states' reliance upon it. Section two describes the Russian energy network and

explains the asymmetric interdependence between Russia and the European states. Finally, section three uses the narrative and four criteria to evaluate the expectations.

Case Study

Section One: The SWIFT System

The US and EU have relied on the Society for Worldwide Interbank Financial Telecommunication (SWIFT) to pursue their political objectives regarding Putin's War in Ukraine. This is nothing new as both have used SWIFT to increase their sanctions' effectiveness (Drezner et al. 41-43). However, SWIFT was not originally intended to be a weapon. Rather the SWIFT system was developed along with other networks like Euroclear as a financial communications tool to facilitate financial interactions. Within the global financial network, treasuries as well as private and government banks are the nodes and SWIFT acts the preeminent, multidirectional tie between almost all nodes. As a result, SWIFT and other financial systems play a key role as intermediaries in the global economy (28). Because of the efficiency and security of the SWIFT system (33), the network grew rapidly and now oversees the interactions of over 11,000 financial banks and institutions (SWIFT). Therefore, SWIFT is a central part of the international financial infrastructure (Drezner et al. 34).

This is evidenced in its governing structure. SWIFT is overseen by the central banks of the G-10, which includes the central banks of both the US and the EU. Furthermore, the system has an oversight forum that includes the central banks of many key players in the global economy, such as the Bank of Russia (SWIFT). SWIFT neither monitors nor controls the messages between users, however, these interactions are regulated by both national and international authorities (SWIFT). Moreover, SWIFT does not expel or disconnect banks,

although it is ultimately under the authority of the EU because it is a Belgian company (SWIFT). Despite this, the US carries a great deal of importance within the SWIFT network. This is due to two reasons. The first is that the U.S. dollar is the global reserve currency (Siripurapu; Drezner et al 117; Bertaut et al.). Any transactions involving U.S. dollars and banks based within the US pass through the Fedwire and Clearing House Interbank Payments System (CHIPS), and are therefore subject to American laws and regulations (Hayes; Kenton; Federal Reserve). The second is that the US is a hub within global financial and economic networks. As a result, the American government can leverage its economic weight and position within the global network to effectively deny the transactions of certain companies or countries (Drezner et al. 117). Although the US is not directly in control of SWIFT, it can leverage its influence unilaterally or work multilaterally with European allies when needed.

The American and European dominance of the SWIFT system has caused other countries to develop alternatives, albeit with varying degrees of success. Both the Russian Federation and People's Republic of China have made their own financial systems to mitigate the far reach of western sanctions. Russia developed the SPFS, which originally provided secure financial messaging domestically (Bank of Russia). The system has recently expanded its reach and now includes banks from Armenia, Belarus, Germany, Kazakhstan, Kyrgyzstan, and Switzerland (TASS). Despite the recent expansion, SPFS' has seen low levels of success due to security issues, system availability, and high transactions costs (Aitov; Aggarwal).

The Chinese system has seen better results. The People's Bank of China has developed the Cross-Border Interbank Payment (CIPS) system to internationalize their currency, the Yuan. CIPS reported that roughly 1,280 financial institutions from over 130 countries have joined the system. CIPS currently relies on the SWIFT system for financial managing; however, it has the

potential to operate independently (Reuters). Most recently, the Bank of Russia and the People's Bank of China are working to link their systems to bypass the SWIFT system (TASS, Economy). Despite Russian and Chinese efforts to develop an alternative system, SWIFT remains as the world's dominant network – at least for the moment.

Overall, the U.S. dollar and the SWIFT system are the lifeblood of the global financial system and its influence on economic health cannot be understated. Given the fact that over 11,000 institutions and banks are involved within the system, the denial of access would be detrimental to the power and prosperity of a country. Because of both SWIFT's necessity to global finance and the lack of widely accepted alternatives, being expelled from it has been likened to crossing the nuclear threshold for financial markets (Drezner et al. 42).

Section Two: Energy Interdependence and Russian Natural Gas

Unlike the global financial network, the global energy market is much more fragmented. In fact, the international oil and gas markets are the products of multiple interrelated networks, such as the energy trade network, the energy transportation network, and the energy financial network (169-170). Each network has its own unique architecture that provides advantages to different actors.

The energy trade market has a unique network architecture because there are two types of nodes relating to production and consumption. The major production nodes include private and state-owned corporations while the consumption nodes include refineries, national governments, and utility companies (172-173). The ties between these nodes include financial institutions, pipelines, and established trade routes between the senders and receivers. That said, both the directionality and volume of trade flow from the energy rich countries to their trade partners. The

geographic and internal consumption differences between these two types of nodes are evident in global trade patterns. Roughly 25% of natural gas and over 70% of oil are traded on the international market (172). Given the quantity and necessity of resources traded, disruption in international trade could have a devastating effect on many countries. The ability of governments to disrupt global energy flows through sanctions, embargoes, and other restrictions varies by state. Successful use of weaponized interdependence in the energy market requires that one state, or group of states, controls a sizable share of the market or is in a monopolistic position relative to the target state (172).

The energy transportation market transports goods in two ways: pipelines and seaborne transit. In this case, the nodes are energy companies, refineries, and pumping stations and the ties are both land and sea pipelines and maritime trade. Oil, on the other hand, is usually transported by seaborne trade with roughly 40 million barrels per day of crude and other refined oil products. The nodes within this network are found geographically at terminals and trade routes (174). Pipeline nodes have a profound impact on the network because they are spatially fixed, expensive, and can span two or more states. To put this differently, pipelines are relationally specific investment. As a result, it is oftentimes prohibitively costly for a state to find an alternative supplier of natural gas (174-175).

The weaponization of a pipeline, however, depends on the political context. When pipelines only connect two states, the authority is split between the governments and companies that own and operate it. But many pipelines are international and span multiple countries. When a pipeline crosses a country, that country becomes an intermediary in the energy trade. In this case the flow of resources does not depend solely on the sending or receiving state, but also on the intermediary, or transit, state (174-175). The transit state can then choose to interdict the flow

of energy through pumping stations and shut-off valves (175). The transit state's power to disrupt the energy trade gives it political power over both the sending and receiving states.

The last key energy network is the financial transaction network. The energy financial network is more consolidated than both the trade and transportation networks because most transactions use the US dollar and rely on US dominated financial institutions. Consequently, most major sales of oil and gas must pass through both SWIFT as well as the US financial and dollar clearing systems. This gives both America and the EU an unprecedented level of power within the network (178-179).

To summarize, the global energy network is comprised of three interwoven networks, each with its own architecture that allows for varying levels of weaponization. To that end, states can leverage the chokepoint effect in each of the networks. States active in the energy trade can leverage their market share to restrict network access. The energy transportation network employs the chokepoint effect differently. This is because the energy transportation network is dominated by relationally and geographically specific investments. States within this network must physically interdict either energy pipelines or maritime trade routes. Lastly, the consolidated structure of the energy transaction network allows for both the US and the EU to both monitor and block the financial transactions that drive the global energy trade.

Although the US and the EU are dominant in the global financial and energy transaction networks, they are not dominant in the energy trade and transportation networks. Most European countries are heavily dependent on trade. Europe has had a long and complex trading relationship with Russia since the Cold War (185). Russia is the main supplier of natural gas to Europe with its exports comprising roughly 40% of the EU's consumption since 2019 (Corbeau; IEA). However, Europe imports more than just natural gas. In 2019 alone, Europe imported

26.9% of its crude oil, 46.7% of its solid fuel, and 41.1% of its natural gas from Russia (Eurostat). Since the War in Ukraine, we have seen Russia weaponize its energy interdependence (Hetzner; Koper and Tsoleva).

But it was not always this way. Russia's weaponization of energy, particularly natural gas, occurred under Russian President Vladimir Putin. The natural gas trade between Russia and Europe was originally seen as an example of "mutually beneficial interdependence" (Drezner et al. 185). But when Putin came to power, he expanded his influence over Russia's state-owned natural gas monopoly, Gazprom. He did this by installing friends and personal connections – many of whom are former KGB and Communist party officials – into positions of authority. Putin uses it to finance his inner circle and to control Russia's natural gas trade (185-187). Gazprom's control over the production, the transportation, and the exportation of natural gas allows Putin to make the company a blunt instrument of national power (189).

Since Putin's takeover of the company, Russia has attempted to expand both its political and coercive influence over its neighbors, albeit with varying degrees of success. Politically speaking, Russia's has generated the most favorable political influence in Serbia and Armenia. Russia has gained some political influence in Austria and Germany but has gained no influence in Poland and Lithuania (191-192). Even though Russia may not have been viewed favorably by the rest of the EU even before the War in Ukraine, it remained the largest exporter of natural gas. Because the natural gas network between Russia and the EU is built by expensive, relationally specific investments, immediately switching off Russian gas is prohibitively costly, thereby allowing Russia to maintain a level of coercive influence. It must be noted that while switching from other energy sources is comparatively easier, doing so comes with costs.

A cursory look into the energy mix of the EU and selected countries indicates Russia's dominance in the energy network. Figure 2 uses energy taking from the EU Statistics Office and

Energy Mix of the EU and Selected Countries (2020)								
	Solid fossil fuels	Natural gas	Oil and petroleum products (excluding biofuel portion)	Renewables and biofuels	Non-renewable waste	Nuclear heat	Electricity (net imports)	Other*
EU	10.2 %	23.7 %	34.5 %	17.4 %	1.0 %	12.7 %	0.1 %	0.4 %
Germany	15.6 %	26.1 %	35.2 %	16.4 %	1.5 %	5.8 %	-0.6 %	0.0 %
Estonia	-0.1 %	7.7 %	5.2 %	27.4 %	0.7 %	0.0 %	6.6 %	52.4 %
France	2.4 %	15.5 %	29.3 %	12.7 %	0.7 %	41.0 %	-1.7 %	0.0 %
Italy	3.5 %	40.5 %	32.9 %	20.4 %	0.8 %	0.0 %	1.9 %	0.0 %
Latvia	0.5 %	19.9 %	35.7 %	39.6 %	1.2 %	0.0 %	3.1 %	0.0 %
Lithuania	1.7 %	25.2 %	39.2 %	21.2 %	0.7 %	0.0 %	8.7 %	3.2 %
Hungary	6.4 %	33.5 %	28.6 %	11.3 %	0.8 %	15.5 %	3.8 %	0.0 %
Poland	39.6 %	16.9 %	28.8 %	12.5 %	1.0 %	0.0 %	1.1 %	0.0 %

(Figure 2)

shows the energy mix of the EU and selected countries (Eurostat, Imports Dependency). The energy mix shows the gross available energy data for each country. Gross Available Energy (GAE) describes the energy used across all activities including energy transformation, supporting operations in the energy sector, final energy consumption, and the use of energy products for non-energy purposes (Eurostat, Imports Dependency). While the definition of gross available energy is broad, it does encompass how dependent a country is on certain fuel types for things other than electricity. That said, it is difficult to show how much electricity for households and industry is produced from natural gas or some other resource. These numbers are for the year 2020, while this is the most recent data, it does demonstrate provide an approximate value for the EU's 2022 mix.

The numbers in Figure 2 provide an approximate value for the energy mix of the EU and selected states. Most of these countries rely heavily on solid fossil fuels, natural gas, or coal; however, both France and Estonia have substantial values for nuclear energy and other forms of energy respectively. For clarification, negative values indicate that a country is a net exporter of that energy product. Figure 3 below shows how much of each energy source is imported for the EU and selected countries. Values that exceed 100% indicate that a country is stockpiling the product. Given that this is for the year 2020, these countries may have built sufficient stockpiles

Import Dependency of the EU and Selected Countries (2020)					
	Total	Solid fossil fuels	Natural gas	Oil and petroleum products (excluding biofuel portion)	Renewables and biofuels
EU	57.50%	35.84%	83.60%	97.00%	2.54%
Germany	63.71%	44.12%	89.10%	96.54%	0.92%
Estonia	10.50%	391.71%	100.00%	130.20%	-38.49%
France	44.46%	96.30%	94.72%	98.55%	2.29%
Italy	73.45%	93.03%	92.85%	88.72%	7.38%
Latvia	45.48%	89.62%	100.10%	105.58%	-41.51%
Lithuania	74.91%	87.88%	98.93%	102.67%	-3.28%
Hungary	56.63%	43.68%	75.62%	87.08%	-4.27%
Poland	42.76%	0.33%	78.25%	96.86%	3.35%

(Figure 3)

to be used in times of crisis. The table indicates that 57.50% of the bloc's total energy is imported. It shows that the majority of both its natural gas and oil products are imported.

Figure 3 shows how much of each energy type is imported by country, Figure 4 shows how much of those imports originate in Russia. It shows that Russia is the largest supplier of natural gas and oil product imports to the selected countries. Values that exceed 100% reveal that the country is importing more than necessary for consumption and exports a different energy product (Eurostat, Imports Dependency). Overall, the total energy mix represented in Figure 2 provides the context of a country’s reliance on Russian energy. For example, all of Estonia’s natural gas is imported with almost 86% originating in Russia. However, natural gas makes up less than 8% of its total energy mix and is thus not as important as alternative energy resources. This implies that Russia’s use of weaponized interdependence may disproportionately impact some states and not others, meaning that understanding the necessity of natural gas and other

Russian Imports in Gross Available Energy for the EU and Selected Countries (2020)				
	Total	Natural Gas	Oil	Coal
EU 27 countries	24.39%	41.11%	36.46%	19.32%
Germany	31.11%	58.94%	35.18%	21.46%
Estonia	21.39%	86.46%	279.37%	0.08%
France	8.41%	20.02%	15.70%	29.70%
Italy	23.80%	40.35%	17.35%	49.83%
Latvia	31.00%	100.10%	25.46%	95.64%
Lithuania	96.05%	50.49%	202.73%	69.08%
Hungary	54.20%	110.41%	57.36%	11.31%
Poland	34.97%	45.48%	76.30%	13.43%

(Figure 4)

products for each state is required.

Section Three: The Narrative

Studying this case of weaponized interdependence and state behavior across the four policy criteria requires understanding the situation’s context. This is best achieved by presenting

a narrative arc which grounds the analysis and assists in explaining each state's behavior and placement on the heuristic over time.

The origins of Russia's most recent invasion date back to Ukraine's Maidan revolution in 2014. The revolution was the result of then President Yanukovich's refusal to pursue economic integration with the EU at Russia's behest (Britannica, Maidan). This decision produced widespread domestic turmoil that resulted in an agreement between the government and parliamentary opposition groups that curtailed the president's power (Britannica, Maidan; Reuters, Timeline). Yanukovich was eventually voted out of office during the next presidential election.

Putin responded to Yanukovich's loss by supporting pro-Russian groups in Ukraine. Through these endeavors Putin annexed Crimea and expanded his support of pro-Russian separatists in the Donbas region. As Ukrainian politics settled, the country opted for increased integration with the EU. These efforts increased following President Volodymyr Zelensky's election in 2019. In 2021, Zelensky made further efforts to join the west by requesting to join NATO. Russia's responded to these actions by amassing soldiers along the Ukrainian border under the guise of conducting training exercises. This buildup culminated in December of 2021, with Putin presenting a list of demands that included a withdrawal of NATO forces in eastern Europe and a commitment to Ukrainian neutrality.

This situation spiraled out of control in February 2022. The US increased its forces in NATO allied countries and a promise to apply severe sanctions if Russia used military force in Ukraine. In this timeframe Vladimir Putin gave a speech denouncing Ukrainian statehood and following these remarks Putin ordered peacekeeping forces into the Donetsk and Luhansk regions. The first western sanctions were launched on February 21st. The western powers

targeted Russian government officials, banks, and financial assets. Additionally, Germany halted the Nord Stream 2 Russian gas pipeline project (Reuters, Timeline). The Biden Administration also issued executive orders that restricted new investment as well as exports and imports from Russia. The next day, the U.S. Treasury sanctioned the Russian VEB and PSB banks – both of which are state-owned banks that finance the Russian defense industry – in addition to placing restrictions on Russian sovereign debt (Brown). On the 23rd, the EU imposed numerous economic measures including freezing the assets of Bank Rossiya, PSB, and VEB.RF (Reuters, Timeline; Martin).

On February 23rd Russian-backed partisans in Ukraine asked for assistance in repelling the Ukrainian military – to which Putin responded on February 24th with “special military operations” in Ukraine. The Russian military invaded Ukraine and launched attacks on major cities, including the capital of Kyiv. Since then, Ukraine has been fighting Russia to secure its sovereignty (Reuters, Timeline).

In response to Russia’s invasion, the US sanctioned the Public Joint Stock Company Sberbank of Russia on February 24th and imposed new debt and equity restrictions (Brown; Martin). Through this sanction all American financial institutions closed accounts and denied any future transactions with Sberbank. The treasury froze the assets of multiple Russian banks including the VTB Bank, Sovcom, Novikom, and Otkritie, and other Belarusian financial institutions. The Department of Commerce restricted Russian access to technology that could be used for governmental and military functions (Brown).

On February 26th, the US and other European powers used the ‘nuclear option’ by ejecting many Russian banks, including the central bank, from the SWIFT system. The US followed up two days later with targeted sanctions on energy-related transactions and foreign

direct investment (Brown; Martin). The US blocked all transactions between American entities and the Central Bank of Russia while the EU placed capital restrictions on Alfa-Bank, Otkritie Financial Corp. Bank, Bank Rossiya, and Promsvyazbank (Martin). During this timeframe additionally Russian banks were removed from SWIFT by the EU.

In March of 2022, the US and its allies imposed trade controls and tariffs on Russian products to further increase economic costs. The US banned the imports of Russian energy products while the EU banned trade in energy related equipment, technology, services, and investments. The west also moved to eliminate Russia's World Trade Organization benefits and privileges at both the World Bank and the International Monetary Fund. Further export and financial controls were passed in March and April such as the US's suspension of energy-related trade with Russia. These efforts intensified as the west found multiple third-party countries and companies that were conducting business with Russia. In May, the US and other G7 countries announced sanctions on the Russian energy trade and began reducing energy-related imports (Brown; Martin).

Russia did not bear the sanctions quietly. In March of 2022, Russia began a general export ban of specific commodities and raw materials (Brown). However, Russia's response became more targeted by threatening that payment for natural gas from 'unfriendly' countries in western Europe would only be accepted in rubles. Putin followed through with his threat by cutting off natural gas exports to Bulgaria and Poland on April 27th, Finland and the Netherlands on May 21st, Denmark on June 1st, France on June 17th, also a 50% reduction in flows to Italy and Slovakia on the 17th, and an unspecified reduction in Austria on the 17th, and finally an over 50% reduction in gas to Germany on June 23rd and 24th (Euractiv; Olsen; Gilchrist; Janicek; RFE/RL's Russian Service).

The measures met with some success as numerous European companies opened accounts to pay for natural gas (Hernandez; Harlan and Pitrelli). Multiple sources confirm that Italian, German, French, Hungarian, Austrian, Czech, Slovak, and Slovene energy companies have opened ruble accounts with Gazprombank, associated with Russia's Gazprom, to keep the natural gas flowing. The opening of ruble accounts raises concerns as to whether these companies are violating the EU's sanctions. Regardless, the opening of ruble accounts complicates the bloc's efforts to economically isolate Putin. Although the EU moved forward with a full ban on coal effective August 2022 and a partial ban on oil effective December 2022, no major bans on gas have occurred at the time of writing (BBC, Russian Oil; Guarascio; Kennedy; Cahill).

A Look at Russia

Applying the heuristic to the narrative shows that Russia moved from a compellence strategy (Quadrant II) to an offensive strategy (Quadrant IV) to pursue its geopolitical goals. Russia decried the sanctions and its ejection from SWIFT as an act of "economic war" and demanded that energy companies from unfriendly countries pay in rubles for their current natural gas imports or risk the end of gas imports (Associated Press; Koper and Tsoleva; Race). This gas-for-rubles threat was thought by some analysts as a ploy to stabilize Russia's faltering currency (Rauhala et al.). Regardless of its intended use, the threat was credible given Europe's reliance on Russian energy. The situational context and the threat indicate that Vladimir Putin leveraged his influence over the energy network to pursue a compellence strategy, thus putting Russia firmly in Quadrant II.

Russia's use of compellence firmly denies the first expectation and supports the second expectation. The significance of this finding cannot be understated. The gas-for-rubles threat

occurred *after* Russia was sanctioned and ejected from SWIFT, not before. There was no major indication that Russia relied on weaponized interdependence to deter intervention in Ukraine. While Putin outright warned of a “lightning-fast response” against intervention of a “strategic nature,” the context of his statement implies that the intervention was militarized in scope (Rauhala et al.). Whether Putin relied on the presence of asymmetric interdependence as an implicit threat towards Europe cannot be determined and is outside the scope of this paper. That said, the lack of an explicit threat from Russia before the allied powers employed weaponized interdependence is taken as the absence of a threat. There was no explicit, deterring threat, and the second expectation is rejected.

Despite the credibility of Putin’s threat, it was denounced as blackmail and flatly denied (Race; European Commission). As noted above, Russia responded with the chokepoint effect by first cutting off Poland and Bulgaria and then other states who resisted the demand. While Baltic and Polish companies did not give into the demand, Italian, French, German, and Hungarian companies acquiesced and opened ruble accounts (Hernandez). As we will see later, the companies that acquiesced came from more energy dependent countries (except for France). This supports the third expectation (that Russia would employ compellence) and major confirms the fourth expectation (that the efficacy of weaponized interdependence varies by the target’s dependence). Furthermore, Putin’s exercise of the chokepoint effect is offensive in nature demonstrates a failure of his original compellence strategy work on all actors studied and achieve the desired result. This moves Russia from Quadrant II to Quadrant IV but confirms the fourth expectation.

A Look at Europe and the United States

Applying the heuristic to the narrative yields interesting results for the US and EU. The US led the allied discussion surrounding their coercive strategy. President Biden and the US government was vocal about the prospect of invasion with Biden threatening that he would hit Putin with sanctions, “like none he’d ever seen” (Prince). Despite this claim, the discussion of ejecting Russia from SWIFT was notably absent from the Biden administration as European leaders feared the ramifications of such an action. The only calls to eject Russia from SWIFT before the invasion came from Baltic officials and US lawmakers who urged a tough stance on the issue. The Biden administration did claim that its initial sanctions package would be far worse than the SWIFT option and stressed that ejecting Russia was still on the table (CBS News and Ewall-Wice). Many government officials including Press Secretary Jen Psaki, Secretary of State Anthony Blinken, National Security Adviser Jake Sullivan, and President Biden himself all stressed that these sanctions were meant to act as a deterrent. Quotes from some officials are below:

- *“[I]f there’s a 95 percent chance of Russia invading without the threat of sanctions ... and a 65 percent chance that they will with them, you’re obviously going to go with the threat of sanctions because you want to reduce the threat of an invasion. So, there is a deterrent” – Press Secretary Psaki.*
- *“The purpose of those sanctions is to deter Russian aggression” – Secretary of State Anthony Blinken.*
- *“The president believes that sanctions are intended to deter” – National Security Adviser Jake Sullivan (Ward and Gedeon).*

At the outset, the Biden administration’s coercive strategy appears to be deterrence (Quadrant I). However, the ambiguity surrounding Russia’s expulsion from SWIFT is

problematic. If anything, the failure to retaliate with “maximum sanctions” (Gangitano) as promised amounts to using a nuclear deterrence strategy without nuclear weapons. Sanctions rely on market access, not on network architecture. Therefore, the agreed upon absence of the SWIFT option from the initial allied response indicates a failure to threaten weaponized interdependence. Even though sanctions were meant as a deterrent strategy (a claim the administration walked back following the invasion) it cannot be listed in Quadrant I on the heuristic due to the technical language of weaponized interdependence. This however is fitting as the nature of the deterrent strategy was ambiguous at best and lacked the most notable weapon in the economic arsenal: ejection from SWIFT.

The failure of the allied deterrence strategy was evident on February 24th as Russian forces invaded Ukraine. What force the allies’ deterrence strategy lacked was made up for in their offensive strategy. To that point, deputy national security adviser Daleep Singh remarked that the levels of cooperation and sanctions were previously unthinkable as European governments all agreed with the most aggressive plans that Washington put on the table. Ejection from SWIFT, a blistering sanctions package, and widespread business exit from Russia economically isolated the country (Gangitano). The offensive economic response was not meant to immediately end the war, but to deprive Russia of its capacity to maintain its military and a competitive economy over time (O'Murchú et al.; White House). This puts the allied strategy in the international financial network purely in Quadrant IV on the heuristic but rejects the first expectation.

As the war progressed, the allies adopted a defensive strategy in the energy network (Quadrant III). While the Americans easily exercised their exit power and ended all Russian energy imports, the Europeans bore the brunt of Russia’s energy weapon and slowly assumed a

defensive posture (Brown; Martin). This defensive posture is exemplified by both a short term and long-term strategy. For the short term, the EU is rationing energy in preparation for heating their homes and businesses in winter (Hernandez, Gas Rationing). For the long-term, the EU is using their exit power to decouple from Russian energy – albeit slowly due to searching for alternative energy sources and developing the necessary infrastructure free from Russian control (Mackrael; Campbell). It must be noted that utilizing exit power is a defensive form of weaponized interdependence (Drezner et al, 196-197; Hafner-Burton et al, 573). Even though exit power does not immediately inflict damage, it does rely on changing the network’s architecture to a node’s advantage. In this case, the European nodes are changing the network structure by severing their ties to the Russian hub. Put differently, if you leave the network, then you cannot be harmed by an actor within it.

With expectations one, two, and three evaluated, we now turn to expectation four and examine the efficacy of Russian weaponized interdependence across four policy dimensions: aid given to Ukraine, political rhetoric, political cooperation, and government policies.

A Look at Europe: Bilateral and Multilateral Aid to Ukraine

An examination of bilateral and multilateral aid flows reveals an inverse correlation between natural gas dependency and aid flows. Figure 5 takes values from Figures 2, 3, and 4 to describe the Russian share of natural gas in the EU’s energy mix and imports (EUROSTAT, Imports Dependency). This figure also details the percentage of Russian gas in each country’s energy mix. Note that values which exceed 100% are used either for stockpiles or for further refining and exporting – which is common in the Baltic countries. It must be noted that in early April 2022, Lithuania achieved natural gas independence through the deployment of a floating liquified natural gas (LNG) terminal and has moved to switch oil suppliers (Udasin; BNS).

Latvia and Estonia also moved forward with a Russian gas ban by the start of 2023 and are considering adopting floating LNG terminals (Euractiv, Russian Gas; ERR).

Natural Gas Mix Figures for the EU and Selected Countries (2020)				
	Energy Mix	Import Dependency	Russian Share of Imports	Russian Share of the Energy Mix
EU 27 countries	23.72%	83.60%	41.11%	8.15%
Germany	26.08%	89.10%	58.94%	13.70%
Estonia	7.73%	100.00%	86.46%	6.68%
France	15.53%	94.72%	20.02%	2.94%
Italy	40.47%	92.85%	40.35%	15.16%
Latvia	19.93%	100.10%	100.10%	19.96%
Lithuania	25.23%	98.93%	50.49%	12.60%
Hungary	33.51%	75.62%	110.41%	27.98%
Poland	16.89%	78.25%	45.48%	6.01%

(Figure 5)

The share of Russian natural gas in the energy mix is in the rightmost column and is calculated by multiplying the values for the energy mix, import dependency, and Russian share of imports. Figure 5 thus indicates how reliant each state is on Russian natural gas. Hungary is the most reliant with 27.98% of its energy coming from Russia. Latvia is second with a value of 19.96%. Italy is third with a value of 15.16%, Germany is fourth with 13.70%, Lithuania is fifth with 12.60%, Estonia is sixth with 6.68%, Poland is seventh with 6.01%, and France is the least dependent with a value 2.94%. Germany and other large EU countries are particularly dependent on Russian gas because they have much more heavy industry which requires large amounts of natural gas as compared to the smaller Baltic states (Udasin). Latvia has already moved forward with a ban and securing alternative sources of natural gas supply and is thus less susceptible

(ERR, Latvia; Euractive, Russian Gas; LNG Prime; Udasin). Overall, Germany, Italy, and Hungary are particularly vulnerable to Russia’s natural gas weapon.

Germany, Italy, and Hungary have given the least bilateral and multilateral aid relative to their GDP. Using aid as a percent of GDP to measure support poses an issue that must be briefly addressed. Despite not giving the value of aid in nominal terms, this measure does indicate a country’s level of support for Ukraine. This measure reveals how costly the aid is to the giver and is shown in Figure 6. In this sense the US, which supplied the most aid to Ukraine, has given less aid as a percent of GDP than the Baltic States and Poland. Put differently, while the US has given the most aid to Ukraine, it does so with relative ease as compared to its Baltic and Polish allies (Antezza et al.). Figure 6 depicts the amount of aid as a percent of GDP given to Ukraine by country. The aid flows of European states support the third expectation – that the success of Russia’s weaponized interdependence would vary by the target’s dependence on Russian energy.

Aid Flows to Ukraine (2022)			
Country	Bilateral Aid	Multilateral (EU) Aid	Total Aid
Estonia	0.86%	0.10%	0.96%
Latvia	0.74%	0.10%	0.84%
Poland	0.50%	0.12%	0.62%
Lithuania	0.19%	0.09%	0.28%
France	0.08%	0.11%	0.19%
Germany	0.09%	0.09%	0.18%
Hungary	0.03%	0.12%	0.15%
Italy	0.03%	0.12%	0.15%
The United States	0.21%		0.21%

(Figure 6)

The one state that defies this expectation is France. Due to its energy mix, France is not as reliant as its partners on Russian energy. Therefore, the comparatively lower amount of aid could be due

to French President Immanuel Macron’s diplomatic approach to the invasion (BBC, Macron; de Hoop Scheffer et al.; Reuters, Macron Calls for Restaint). Overall, the correlation between pledged aid and import dependency supports the expectation that the effect of weaponized interdependence varies by the target’s reliance on Russian imports.

Political Rhetoric

While allied leadership condemned the invasion, there was substantial rhetorical variation as some leaders made aggressive overtures while others called for moderation. The Baltics States and Poland were the EU’s most outspoken and aggressive states. They were the first countries to call for the expulsion of Russian banks from SWIFT and were the most ardent supporters of supplying Ukraine and embargoing all Russian energy (Bayer et al.; Bergmane; Ellyatt; Estonian World; Erlanger; Higgins; Lee; Pop; RFE/RL; Sly; Tyler). Lithuanian leadership went so far as to call for Putin’s removal from power while Estonian Prime Minister Kaja Kallas firmly rejected any idea of a peace deal (Burchard; Erlanger; Lee; Sly). Likewise Latvian Prime Minister, Arturs Krišjānis Kariņš claimed that, “Russia has to lose,” but warned that peace should not come, “at any cost” (Barigazzi and Herszenhorn; Burchard). Polish leadership condemned Putin as a “war criminal” and accused him of genocide in Ukraine and using energy dependence to ensnare Europe (Euronews, Poland; Morawiecki).

Lithuanian, Estonian, and Polish leadership were overtly critical of French and German response to the invasion. When asked in an interview about calls for compromise from French and German leadership, Poland’s Prime Minister Mateusz Morawiecki said, “Some Western European leaders wanted to have cheap, natural resources and peace. And what they got is very expensive raw materials and natural resources and war” (Islam). Estonian and Polish leadership

have routinely criticized French President Immanuel Macron for continuing talks with Putin (Erlanger; Sly).

The Eastern European approach contrasts starkly with the Italian, French, German, and Hungarian responses. Although Italy's prime minister and foreign minister have condemned the invasion, the Italian response has not been as aggressive as its eastern neighbors (Borsari; Coratella). French President Immanuel Macron has decried the invasion saying, "Russia cannot and should not win," and that the war was the fault of Vladimir Putin alone (Ebel and Karmanau; Reuters, Putin Alone Chose War). That said, Macron has called for restraint and to avoid Russia's humiliation in pursuit of a negotiated solution (d'Istria and Ourdan; News Wires; Reuters, Macron Calls for Restraint). German Chancellor Olaf Scholz's rhetoric may not be as controversial as Macron's, it still leaves much to be desired. Scholz originally promised that Russia would, "pay a high price for this aggression," but refrained from advocating for Ukrainian victory, expressed opposition to energy sanctions and SWIFT-related measures, and defended lackluster aid flows by saying, "I find hasty actions and maverick German efforts questionable" (Karnistschnig et al.; McGuinness; Reuters, Scholz). He and other German leadership have routinely expressed opposition to measures on economic grounds saying that such acts are unsustainable (Reuters, Scholz).

As French and German leadership have called for restraint, Hungarian leadership has outright condemned elements of the EU's response calling sanctions counterproductive (Novak). This has spurred Ukraine to accuse Hungary of "helping Putin win" (Askew). Even though Hungarian President Viktor Orbán condemned the invasion and said that the invasion poses an "constant threat," he failed to publicly criticize Putin – with whom he shares close ties (Higgins and Novak; Novak; Spike; Szakacs and Zinets). Orbán has routinely criticized the bloc's

economic response citing economic concerns and saying, “Initially I thought we had only shot ourselves in the foot, but now it is clear that the European economy has shot itself in the lungs, and it is gasping for air” (RFE/RL's Ukrainian Service; Szakacs and Zinets).

Political Cooperation

Another way to examine the efficacy of Russian weaponized interdependence is to analyze the EU's ability to collectively respond to Russia. It is intuitive that states which are more susceptible to coercion will be less likely to push for harsher measures out of fear. In this way, resistance to collective action against Russia acts as a proxy for the successful use of weaponized interdependence.

Italy, Germany, and Hungary are comparatively more reliant on Russian energy. It is therefore unsurprising that these countries resisted deploying weaponized interdependence and sanctions in general (Gehrke and Burchard; Higgins). Although Russian banks were ejected from the SWIFT system, Italy, Germany, and Hungary were originally opposed to this measure (Jankowicz; Karnitschnig et al.; Pop). This drew the ire of former European Council President Donald Tusk who claimed that the three countries have “disgraced themselves” (Jankowicz). All three countries later redeemed themselves by toeing the line and supporting Russia's expulsion from SWIFT.

These countries support for energy-related sanctions varied substantially. Both Germany and Hungary have rejected calls for a ban on natural gas and greatly resisted the coal and partial oil bans (BBC; Russian Oil.; Cahill; Reuters, Scholz; Szakacs and Zinets). The coal the ban was delayed for a month due to German resistance and both countries expressed concerns regarding an oil ban (Cahill; Guarascio; Schuetze). Germany would later support the oil ban, the EU had to

make exceptions for Hungary and other heavily dependent states (Cahill). To this end, Viktor Orbán has bragged about his ability to hinder the energy ban, declaring the agreement a “victory” and has consistently broken ranks with the EU to ensure energy security (BBC, Russian Oil; Zinets).

Government Policy

The final criterion used to examine the efficacy of Russian weaponized interdependence is the policy choices of individual European governments. Examining these policy choices allow for variation in each government’s response to Russian coercion. That said, the governments in question did increase defense spending and worked to diversify energy flows (except for Hungary which increased spending but is currently negotiating a natural gas deal with Russia). (Adamowski; BNS and LRT.lt; LSM.lv; Mackenzie; Reuters, Orbán; RFE/RL's Hungarian Service). Consistent with earlier results, the Baltic States and Poland were aggressive towards Russia while Germany was cautious, and Hungary was antagonistic towards its allies.

The Baltic States and Poland were among the first countries to show support by conducting state visits to Ukraine’s capital, Kiev (Reuters, Visiting Kyiv). These countries were particularly aggressive by calling for a no-fly zone over Ukraine (LSM.lv, No fly zone; Reuters, No fly zone). Lithuania has perhaps been the most aggressive by cutting off the flow of sanctioned EU goods from the Russian enclave, Kaliningrad – a move that Russia called unprecedented and illegal (Ellyatt). Poland has distinguished itself as Ukraine’s champion in the EU. The country acts as a hub for aid flowing into Ukraine and has housed millions of refugees since the war began (Cienski and Toosi; Higgins; Tyler).

Germany, Italian, and French leadership have also visited Ukraine's capital – albeit much later than their eastern counterparts (Benhold and Eddy). The French government has created additional humanitarian funds and advocated for an economic relief package to help EU citizens harmed by Russian weaponized interdependence (Reuters, EU Approves French Scheme). Italian Prime Minister Mario Draghi played a subtle yet powerful role in the allied response to Russia. Draghi along with U.S. Secretary of the Treasury Janet Yellen crafted the package that ejected Russia from the SWIFT system – a notable feat considering Italy's contentious domestic politics and special relationship with Russia (Borsari; Coratella).

Hungarian President Viktor Orbán has yet to make an official visit to Ukraine and has complicated Europe's response to Russia in pushing for US backed peace negotiations (RFE/RL, Orban). Their minister of foreign affairs, Péter Szijjártó, announced that Hungary would not allow EU weapons shipments to Ukraine to pass through its territory, meaning that military aid would have to flow through Poland (Bayer). Furthermore, Hungary announced that it would not provide military aid to Ukraine but would protect refugees (Novak). If anything Orbán's actions have led to a rift between Hungary and both Poland and Ukraine – with Ukrainian leadership accusing Hungary of helping Putin win the war (Askew; Higgins).

Analyzing data across the four dimensions indicates that energy dependency impacted national responses to Russia. While minor exceptions to the findings exist and can be explained by other phenomena, the findings confirm the fourth expectation. In general, the proportion of aid flows to Ukraine are higher in less dependent countries. These countries also utilize more aggressive rhetoric and are more willing to criticize allies into supporting Ukraine. In addition, these countries are more willing to independently pass more aggressive policies and less likely to inhibit collective efforts to sanction Russia.

Conclusion

This work has combined a network conception of power as a result of asymmetric interdependence with coercive strategies. In so doing, I have created a dynamic framework that details strategies for both the coercer and coerced that is generalizable beyond the actors associated with the Ukraine Crisis. Regarding this specific case study, I find that both the US, its allies, and Russia failed to effectively incorporate weaponized interdependence in a deterrent strategy. This implies that using weaponized interdependence is costly and potentially undermines a network's attractiveness and survivability going forward.

While Russia did employ a compellence strategy and the European Union assumed a defensive strategy in response, both allied and Russian leadership pursued an offensive approach within networks in which they were dominant actor. Therefore, a state can use coercive strategies that work within and across networks. This broadens the framework to include both the coercer and the coerced. The case study also shows that the coercive strategy's efficacy relies on 1) the dependency of the coerced upon the coercer, 2) the credibility of the coercer's claims, and 3) the fungibility of the coerced node's ties within the network.

The case study encountered specific issues that highlight avenues of future research. Asymmetric and weaponized interdependence utilizes multiple terms that can be amorphous in the real world. What exactly constitutes a dependency, and can it be both summarily measured and exploited? We see here that import dependency may be measurable but requires an in-depth understanding of the political and economic context. Because of this, we see some states take a far more aggressive stance towards the coercer than others despite being similarly reliant on the coercer. This indicates the need for quantitative indicators of dependency going forward in

addition to a qualitative understanding of the political context – which is hardly an easy endeavor. To this end, the study also highlights the need for a broader analysis of instances of weaponized interdependence to verify the framework’s validity. That said, the use of network analysis in international relations will have much to offer scholars going forward.

Bibliography

- Adamowski, Jaroslaw. "Estonia Increases Defense Spending to Buy Air Defense Systems, More Weapons." *Defense News*, Defense News, 25 Mar. 2022, <https://www.defensenews.com/global/europe/2022/03/25/estonia-increases-defense-spending-to-buy-air-defense-systems-more-weapons/>.
- Aggarwal, Parv. "Parv Aggarwal: How U.S. Sanctions Are Fostering Innovative Strategies for Resiliency in Russia." *Russia and Eurasia Program*, 28 Apr. 2022, <https://sites.tufts.edu/flecherrussia/parv-aggarwal-how-u-s-sanctions-are-fostering-innovative-strategies-for-resiliency-in-russia/>.
- Айтов, Тимур. "Натянутая Струна. Возможно Ли Отключение России От Swift." *Forbes.ru*, Forbes.ru, 15 Mar. 2018, <https://www.forbes.ru/finansy-i-investicii/358573-natyanutaya-struna-vozmozhno-li-otklyuchenie-rossii-ot-swift>.
- Antezza, Arianna, et al. "Ukraine Support Tracker - A Database of Military, Financial and Humanitarian Aid to Ukraine." *Kiel Institute*, <https://www.ifw-kiel.de/topics/war-against-ukraine/ukraine-support-tracker/>.
- Askew, Joshua. "Hungary 'Helping Putin' in the War, Says Ukraine's Foreign Ministry." *Euronews*, 7 Apr. 2022, <https://www.euronews.com/2022/04/07/hungary-helping-putin-in-the-war-says-ukraine-s-foreign-ministry>.
- Associated Press. "Putin Wants 'Unfriendly Countries' to Pay Rubles for Gas." *AP NEWS*, Associated Press, 23 Mar. 2022, <https://apnews.com/article/russia-ukraine-putin-business-europe-moscow-4790d3d85ac2cf9a8d8b19d2717c0e03>.

- Bank of Russia. “Financial Messaging System of the Bank of Russia (SPFS).” *Financial Messaging System of the Bank of Russia (SPFS) | Bank of Russia*, http://www.cbr.ru/eng/psystem/fin_msg_transfer_system/.
- Barbieri, Katherine. “Economic Interdependence: A Path to Peace or a Source of Interstate Conflict?” *Journal of Peace Research*, vol. 33, no. 1, 1996, pp. 29–49., <https://doi.org/10.1177/0022343396033001003>.
- Barigazzi, Jacopo, and David M. Herszenhorn. “Latvian PM: 'Russia Has to Lose'.” *POLITICO*, POLITICO, 30 May 2022, <https://www.politico.eu/article/latvian-pm-russia-has-to-lose/>.
- Bayer, Lili, et al. “Latvia's Foreign Minister Wants Planes for Ukraine - and Sees 'Momentum'.” *POLITICO*, POLITICO, 29 Apr. 2022, <https://www.politico.eu/article/latvian-minister-sees-momentum-to-provide-planes-to-ukraine/>.
- Bayer, Lili. “Hungary Refuses to Allow Weapons Transit to Ukraine.” *POLITICO*, POLITICO, 1 Mar. 2022, <https://www.politico.eu/article/hungary-foreign-minister-peter-szijjarto-weapon-transit-ukraine/>.
- BBC. “Russian Oil: Eu Agrees Compromise Deal on Banning Imports.” *BBC News*, BBC, 31 May 2022, <https://www.bbc.com/news/world-europe-61638860>.
- BBC. “Ukraine Anger as Macron Says 'Don't Humiliate Russia'.” *BBC News*, BBC, 4 June 2022, <https://www.bbc.com/news/world-europe-61691816>.
- Bellinger III, John B. “How Russia's Invasion of Ukraine Violates International Law.” *Council on Foreign Relations*, Council on Foreign Relations, <https://www.cfr.org/article/how-russias-invasion-ukraine-violates-international-law>.
- Bennhold, Katrin, and Melissa Eddy. “As European Leaders Visit Kyiv, Putin Cuts Their Gas Supply.” *The New York Times*, The New York Times, 17 June 2022,

<https://www.nytimes.com//2022/06/16/world/europe/russia-gas-cuts-ukraine-germany.html?searchResultPosition=4>.

Bergmane, Una. "Latvia's First Response to Russia's War in Ukraine." *Foreign Policy Research Institute*, 16 May 2022, <https://www.fpri.org/article/2022/03/latvias-first-response-to-russias-war-in-ukraine/>.

Bertaut, Carol, et al. "The International Role of the U.S. Dollar." *The Fed - The International Role of the U.S. Dollar*, The Federal Reserve Bank, 10 June 2021, <https://www.federalreserve.gov/econres/notes/feds-notes/the-international-role-of-the-u-s-dollar-20211006.htm>.

Bevir, Mark. "Network." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., <https://www.britannica.com/topic/network-sociology>.

BNS. "Oil Refinery in Lithuania to Only Import Saudi Crude – Minister." *Lrt.lt*, Lrt.lt, 25 Mar. 2022, <https://www.lrt.lt/en/news-in-english/19/1654425/oil-refinery-in-lithuania-to-only-import-saudi-crude-minister>.

Borsari, Federico. "Italy's Unwavering Support for Ukraine." *CEPA*, 22 June 2022, <https://cepa.org/italys-unwavering-support-for-ukraine/>.

Brooks, Rosa. *How Everything Became War and the Military Became Everything: Tales from the Pentagon*. Simon & Schuster Paperbacks, 2017.

Brown, Chad P. "Russia's War on Ukraine: A Sanctions Timeline." *PIIE*, 18 July 2022, <https://www.piie.com/blogs/realtime-economic-issues-watch/russias-war-ukraine-sanctions-timeline>.

Burchard, Hans von der. "Scholz, Once Again, Defends Germany over Ukraine Support, Putin Talks." *POLITICO*, POLITICO, 7 June 2022, <https://www.politico.eu/article/scholz-defend-germany-weapon-supplies-ukraine-talk-putin/>.

Cahill, Ben. "European Union Imposes Partial Ban on Russian Oil." *European Union Imposes Partial Ban on Russian Oil | Center for Strategic and International Studies*, 22 July 2022, <https://www.csis.org/analysis/european-union-imposes-partial-ban-russian-oil#:~:text=A1%3A%20On%20June%203%2C%20the,as%20of%20February%205%2C%202023.>

Campbell, Maeve. "Europe Cuts Russian Gas Imports: So What Are the Energy Alternatives?" *Euronews*, 27 Apr. 2022, <https://www.euronews.com/green/2022/04/27/europe-scrambles-to-keep-the-lights-on-as-it-sidelines-russian-gas>.

CBS News, and Sarah Ewall-Wice. "Biden and Europe Sit on One Key Sanction against Russia: The Swift Network." *CBS News*, CBS Interactive, <https://www.cbsnews.com/news/russia-sanctions-swift-network-financial-transactions/>.

CBS News. "Russia's Ruble Worth Less than 1 Cent after West Tightens Sanctions." *CBS News*, CBS Interactive, 1 Mar. 2022, <https://www.cbsnews.com/news/russia-ukraine-ruble-sanctions/>.

Ciensi, Jan, and Nahal Toosi. "Ukraine War Turns Poland into America's 'Indispensable' Ally." *POLITICO*, POLITICO, 25 Mar. 2022, <https://www.politico.eu/article/ukraine-war-turns-poland-from-pariah-to-indispensable-us-ally/>.

Cohen, Benjamin J., and Randall Germain. "Chapter 7: Money, Power, Authority." *Susan Strange and the Future of Global Political Economy: Power, Control and Transformation*, Routledge, 2016.

- Copeland, Dale C. "Pp. 5-13." *Economic Interdependence and War: A Theory of Trade Expectations*, Vol. 20, No. 4 ed., International Security, The MIT Press, 1996, pp. 5–41.
- Coratella, Teresa. "Italy's Challenging Divorce from Russia." *ECFR*, 9 Mar. 2022, <https://ecfr.eu/article/italys-challenging-divorce-from-russia/>.
- Corbeau, Anne-Sophie. "How Deep Is Europe's Dependence on Russian Oil?" *State of the Planet*, 22 Mar. 2022, <https://news.climate.columbia.edu/2022/03/14/qa-how-deep-is-europes-dependence-on-russian-oil/#:~:text=In%202020%2C%20Europe%2C%20including%20Turkey,gas%20demand%20of%20512%20bcm.>
- Dagres, Holly. "The 'Maximum Pressure' Campaign Undermines Trump's National Security Strategy." *Atlantic Council*, 12 Feb. 2020, <https://www.atlanticcouncil.org/blogs/iransource/the-maximum-pressure-campaign-undermines-trumps-national-security-strategy/>.
- de Hoop Scheffer, Alexandra, et al. "France and the Western Response to Russia's War on Ukraine." *GMFUS*, <https://www.gmfus.org/event/france-and-western-response-russias-war-ukraine>.
- d'Istria, Thomas, and Rémy Ourdan. "How Macron Became Ukraine's Most Hated Ally." *Le Monde.fr*, Le Monde, 16 June 2022, https://www.lemonde.fr/en/international/article/2022/06/16/macron-has-become-ukraine-s-most-hated-ally_5987056_4.html.
- Drezner, Daniel W., et al. *The Uses and Abuses of Weaponized Interdependence*. Brookings Institution Press, 2021.

Ebel, Francesca, and Yuras Karmanau. "Macron Says Russia Can't Win in Ukraine after Strike on Mall." *AP NEWS*, Associated Press, 29 June 2022, <https://apnews.com/article/russia-ukraine-politics-united-nations-terrorist-attacks-be890f11b0a5abfb41ddb1cfc8d5b212>.

Editors of Encyclopaedia Britannica. "Appeasement." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., <https://www.britannica.com/topic/appeasement-foreign-policy>.

The Editors of Encyclopaedia Britannica. "The Election of Volodymyr Zelensky and Continued Russian Aggression." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., <https://www.britannica.com/place/Ukraine/The-election-of-Volodymyr-Zelensky-and-continued-Russian-aggression>.

Ellyatt, Holly. "Moscow and NATO Could Be about to Clash over Russia's European Exclave Kaliningrad." *CNBC*, CNBC, 23 June 2022, <https://www.cnbc.com/2022/06/22/russia-and-nato-member-lithuania-are-clashing-over-kaliningrad.html>.

Erlanger, Steven. "Estonia's Tough Voice on Ukraine Urges No Compromise with Putin." *The New York Times*, The New York Times, 16 May 2022, <https://www.nytimes.com/2022/05/16/world/europe/estonia-kallas-ukraine-russia.html>.

ERR, ERR News |. "Estonia to Stop Importing Russian Gas by End of 2022." *ERR*, 7 Apr. 2022, <https://news.err.ee/1608557521/estonia-to-stop-importing-russian-gas-by-end-of-2022>.

ERR. "Latvia to Initially Join Paldiski LNG Terminal." *ERR*, 21 Apr. 2022, <https://news.err.ee/1608571222/latvia-to-initially-join-paldiski-lng-terminal>.

Estonian World, and About The Author. Estonian World. Estonian World is a global independent online magazine. "Updates: Russia's Invasion of Ukraine – Reactions in Estonia." *Estonian World*, 28 July 2022, <https://estonianworld.com/security/blog-russia-ukraine-crisis-a-view-from-estonia/>.

Euractiv. “Baltic States Become First in Europe to Stop Russian Gas Imports.”

Www.euractiv.com, EURACTIV, 4 Apr. 2022,

<https://www.euractiv.com/section/energy/news/baltic-states-become-first-in-europe-to-stop-russian-gas-imports/>.

Euractiv. “Timeline: The Gas War between Russia and the West.” *Www.euractiv.com*,

EURACTIV, 24 June 2022, <https://www.euractiv.com/section/energy/news/timeline-the-gas-war-between-russia-and-the-west/>.

Euronews. “Exclusive: Poland's PM on Ukraine War and 'Short-Sighted' EU States.” *Euronews*,

5 May 2022, <https://www.euronews.com/my-europe/2022/05/05/exclusive-poland-s-pm-on-ukraine-war-imperial-russia-and-short-sighted-eu-states>.

European Commission. “Press Corner.” *European Commission - European Commission*,

https://ec.europa.eu/commission/presscorner/detail/en/statement_22_2682.

EUROSTAT. “Energy Imports Dependency.”

https://ec.europa.eu/eurostat/databrowser/view/NRG_IND_ID__custom_1851622/bookmark/table?lang=en&bookmarkId=72cae929-3952-46b9-b363-f2a978a1fd64. Accessed 28 July 2022.

EUROSTAT. “From Where Do We Import Energy ?” *Shedding Light on Energy in the EU*,

2020, <https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2c.html#carouselControls?lang=en>.

Faulconbridge, Guy. “West Could Cut Russia from Swift, Sanction Nord Stream, Latvia Says.”

Reuters, Thomson Reuters, 7 Dec. 2021, <https://www.reuters.com/world/europe/west-could-cut-russia-swift-sanction-nord-stream-latvia-says-2021-12-07/>.

- Federal Reserve. “Fedwire® Funds Service.” *The Federal Reserve*, The Federal Reserve, <https://www.frbservices.org/financial-services/wires>.
- Friedman, Uri. “What's the Likelihood of Nuclear War?” *The Atlantic*, Atlantic Media Company, 23 Mar. 2022, <https://www.theatlantic.com/ideas/archive/2022/03/ukraine-russia-nuclear-weapons-cold-war/627587/>.
- Gangitano, Alex. “White House: Kicking Russia out of Swift Unlikely to Be in Initial Sanctions Package.” *The Hill*, The Hill, 18 Feb. 2022, <https://thehill.com/homenews/administration/594961-white-house-kicking-russia-out-of-swift-unlikely-to-be-in-initial/>.
- Gartzke, Erik, and Oliver Westerwinter. “The Complex Structure of Commercial Peace Contrasting Trade Interdependence, Asymmetry, and Multipolarity.” *Journal of Peace Research*, vol. 53, no. 3, 2016, pp. 325–343., <https://doi.org/10.1177/0022343316637895>.
- Gehrke, Laurenz, and Hans von der Burchard. “Scholz: Russian Energy Ban Would Mean European Recession.” *POLITICO*, POLITICO, 23 Mar. 2022, <https://www.politico.eu/article/olaf-scholz-warns-against-russia-energy-embargo/>.
- Gilchrist, Karen. “‘We Are in a Hybrid War’: German Foreign Minister Says as Russia Cuts Gas Supplies to Europe.” *CNBC*, CNBC, 29 June 2022, <https://www.cnbc.com/2022/06/29/russia-ukraine-war-germany-concerned-amid-deepening-energy-crisis.html>.
- Goddard, Stacie E. “Embedded Revisionism: Networks, Institutions, and Challenges to World Order.” *International Organization*, vol. 72, no. 4, 2018, pp. 763–797., <https://doi.org/10.1017/s0020818318000206>.

- Guarascio, Francesco. “EU's Full Ban on Russian Coal to Be Pushed Back to Mid-August - Sources.” *Reuters*, Thomson Reuters, 7 Apr. 2022, <https://www.reuters.com/business/energy/eus-full-ban-russian-coal-be-pushed-back-mid-august-source-2022-04-07/>.
- Hafner-Burton, Emilie M., et al. “Network Analysis for International Relations.” *International Organization*, vol. 63, no. 3, 2009, pp. 559–592., <https://doi.org/10.1017/s0020818309090195>.
- Harlan, Chico, and Stefano Pitrelli. “Europe Accepts Putin's Demands on Gas Payments to Avoid More Shut-Offs.” *The Washington Post*, WP Company, 24 May 2022, <https://www.washingtonpost.com/world/2022/05/24/eu-russian-gas-putin-rubles/>.
- Hayes, Adam. “Introduction to the Clearing House Interbank Payments System (Chips) Definition.” *Investopedia*, Investopedia, 19 May 2021, <https://www.investopedia.com/terms/c/clearing-house-interbank-payments-system-chips.asp#:~:text=CHIPS%20and%20the%20Fedwire%20funds,transactions%20denominated%20in%20U.S.%20dollars>.
- Hernandez, America. “Rubles for Gas: Who's Paid so Far?” *POLITICO*, POLITICO, 26 May 2022, <https://www.politico.eu/article/ruble-gas-paid-russia-eu/>.
- Hernandez, America. “The EU's Gas-Rationing Plan Faces a Haircut.” *POLITICO*, POLITICO, 26 July 2022, <https://www.politico.eu/article/eu-gas-rationing-plan-expected-to-pass/>.
- Hetzner, Christiaan. “Gazprom 'Blackmail' Backfires as EU Vows to End Energy Dependence on Russia.” *Fortune*, Fortune, 27 Apr. 2022, https://fortune.com/2022/04/27/gazprom-blackmail-backfires-eu-vows-end-energy-dependence-russia/?queryly=related_article.

Higgins, Andrew, and Benjamin Novak. "With Ukraine Invasion, Hungary's Leader Softens His Embrace of Russia." *The New York Times*, The New York Times, 2 Apr. 2022,

<https://www.nytimes.com/2022/04/02/world/europe/hungary-orban-russia-ukraine.html>.

Higgins, Andrew. "Long on Europe's Fringe, Poland Takes Center Stage as War Rages in Ukraine." *The New York Times*, The New York Times, 25 Mar. 2022,

<https://www.nytimes.com/2022/03/25/world/europe/poland-ukraine-russia.html>.

Hirschman, Albert O. *National Power and the Structure of Foreign Trade*. University of California Press, 2018.

IEA. "How Europe Can Cut Natural Gas Imports from Russia Significantly within a Year - News." *IEA*, 1 Mar. 2022, <https://www.iea.org/news/how-europe-can-cut-natural-gas-imports-from-russia-significantly-within-a-year>.

Ip, Greg. "Global Economic Warfare Intensifies as Military Conflict Recedes." *The Wall Street Journal*, Dow Jones & Company, 8 Sept. 2021, <https://www.wsj.com/articles/global-economic-warfare-intensifies-as-military-conflict-recedes-11631109600>.

Islam, Faisal. "Putin Weaponising Ukraine's Crops, Says Polish PM." *BBC News*, BBC, 24 May 2022, <https://www.bbc.com/news/business-61562864>.

Janicek, Karel. "Russia Again Cuts Natural Gas Exports to European Countries." *ABC News*, ABC News Network, <https://abcnews.go.com/International/wireStory/russia-cuts-natural-gas-exports-european-countries-85459033>.

Jankowicz, Mia. "Former EU Chief Shames Germany, Hungary, and Italy for Blocking the Harshest Sanctions on Russia." *Business Insider*, Business Insider, 25 Feb. 2022, <https://www.businessinsider.com/tusk-slams-germany-hungary-italy-over-weak-russia-sanctions-2022-2>.

- Judge, Kathryn. "Intermediary Influence." *The University of Chicago Law Review*, vol. 82, no. No. 2, 2015, pp. 573–642.
- Karnitschnig, Matthew, et al. "Inside Olaf Scholz's Historic Shift on Defense, Ukraine and Russia." *POLITICO*, POLITICO, 12 June 2022, <https://www.politico.eu/article/olaf-scholz-historic-shift-defense-ukraine-russia-war/>.
- Kennedy, Niamh. "Eu Agrees on Partial Ban of Russian Oil Imports." *CNN*, Cable News Network, 31 May 2022, <https://www.cnn.com/2022/05/30/energy/eu-russian-oil/index.html>.
- Kenton, Will. "Fedwire Definition." *Investopedia*, Investopedia, 8 July 2022, <https://www.investopedia.com/terms/f/fedwire.asp>.
- Keohane, Robert O. "Coping with Complexity in the International System. Edited by Jack Snyder and Robert Jervis. Boulder: Westview, 1993. 366p." *American Political Science Review*, vol. 88, no. 2, 1994, pp. 521–522., <https://doi.org/10.2307/2944788>.
- Keohane, Robert O., and Joseph S. Nye. "Review: Power and Interdependence Revisited." *International Organization*, vol. 41, no. 4, 1987, pp. 725–753., <https://doi.org/10.1017/s0020818300027661>.
- Kim, Lisa. "U.S. and Allies to Remove Some Russian Banks from Swift, Sanction Central Bank." *Forbes*, Forbes Magazine, 28 Feb. 2022, <https://www.forbes.com/sites/lisakim/2022/02/26/us-and-allies-to-remove-some-russian-banks-from-swift-sanction-central-bank/?sh=77ee0329165a>.
- Kirshner, Jonathan. "Review Essay: Economic Sanctions: The State of the Art." *Security Studies*, vol. 11, no. 4, 2002, pp. 160–179., <https://doi.org/10.1080/714005348>.

- Koper, Anna, and Tsvetelia Tsoleva. "Europe Decries 'Blackmail' as Russia Cuts Gas to Poland, Bulgaria." *Reuters*, Thomson Reuters, 27 Apr. 2022, <https://www.reuters.com/business/energy/gazprom-says-it-halts-gas-supplies-poland-bulgaria-payments-row-2022-04-27/>.
- Kramer, Andrew E. "Russia Cuts Gas, and Europe Shivers." *The New York Times*, The New York Times, 6 Jan. 2009, <https://www.nytimes.com/2009/01/07/world/europe/07gazprom.html>.
- Lee, Matthew. "AP Interview: Lithuania FM Calls for Regime Change in Russia." *AP NEWS*, Associated Press, 9 May 2022, <https://apnews.com/article/russia-ukraine-putin-europe-moscow-lithuania-0f7be6f8d1afcd1fddcacd9f6938536d>.
- Leonard, Mark, and Ulrike Franke. "Connectivity Wars." *ECFR*, 20 Jan. 2016, https://ecfr.eu/publication/connectivity_wars_5064/#:~:text=%E2%80%9CConnectivity%20Wars%3A%20Why%20migration%2C,hit%20out%20at%20each%20other.
- Leonard, Mark. "White Paper the Age of Economic Coercion: How Geo-Politics Is ..." *European Council of Foreign Relations*, European Council of Foreign Relations, 2016, https://www3.weforum.org/docs/WEF_Age_of_Economic_coercion.pdf.
- Lister, Tim, et al. "Here's What We Know about How Russia's Invasion of Ukraine Unfolded." *CNN*, CNN, 24 Feb. 2022, <https://www.cnn.com/2022/02/24/europe/ukraine-russia-attack-timeline-intl/index.html>.
- LNG Prime Staff. "Latvia to Get Regasified LNG via Lithuania's Klaipeda Terminal." *LNG Prime*, 6 Mar. 2022, <https://lngprime.com/lng-terminals/latvia-to-get-regasified-lng-via-lithuanias-klaipeda-terminal/44876/>.

LRT.lt, and BNS. “Lithuania Raises Defence Spending to 2.52 Percent of GDP.” *Lrt.lt*, Lrt.lt, 17 Mar. 2022, <https://www.lrt.lt/en/news-in-english/19/1647017/lithuania-raises-defence-spending-to-2-52-percent-of-gdp>.

LSM.lv. “Baltic and Ukrainian Parliaments Call for No-Fly Zone.” *LSM*, LSM, 24 Mar. 2022, <https://eng.lsm.lv/article/politics/saeima/baltic-and-ukrainian-parliaments-call-for-no-fly-zone.a449464/>.

LSM.lv. “Latvian Government Confirms Increased Defense Spend.” *LSM*, LSM, 30 Mar. 2022, <https://eng.lsm.lv/article/society/defense/latvian-government-confirms-increased-defense-spend.a450233/#:~:text=Defense%20Minister%20Artis%20Pabriks%20hailed%20the%20commitment%20to%20spending%20more%20on%20defense.&text=Today%2C%20on%20the%20anniversary%20of,best%20deterrence%20against%20any%20aggressor>.

Mackenzie, Christina. “Seven European Nations Have Increased Defense Budgets in One Month. Who Will Be next?” *Breaking Defense*, 22 Mar. 2022, <https://breakingdefense.com/2022/03/seven-european-nations-have-increased-defense-budgets-in-one-month-who-will-be-next>.

Mackrael, Kim. “As Europe Seeks to Move Away from Russian Gas, Which Clean-Energy Technologies Will Benefit?” *The Wall Street Journal*, Dow Jones & Company, 26 Apr. 2022, <https://www.wsj.com/articles/europe-russian-gas-renewables-solar-wind-11650392295>.

Martin, Richard. “Sanctions against Russia – a Timeline.” *S&P Global*, 21 July 2022, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/sanctions-against-russia-8211-a-timeline-69602559>.

- Mastanduno, Michael. "Economic Statecraft, Interdependence, and National Security: Agendas for Research." *Security Studies*, vol. 9, no. 1-2, 1999, pp. 288–316.,
<https://doi.org/10.1080/09636419908429402>.
- McGuinness, Damien. "Germany's Scholz Wobbles on Tanks for Ukraine." *BBC News*, BBC, 28 May 2022, <https://www.bbc.com/news/world-europe-61604329>.
- Morawiecki, Mateusz. "Polish PM: Europe Must Abandon All Illusions about Russia." *Subscribe to Read | Financial Times*, Financial Times, 25 Feb. 2022,
<https://www.ft.com/content/315a342d-d646-4061-ab4a-d2455b6a7221>.
- News Wires. "Macron Draws New Wave of Criticism over Call Not to 'Humiliate' Russia." *France 24*, France 24, 6 June 2022, <https://www.france24.com/en/europe/20220606-macron-draws-new-wave-of-criticism-over-call-not-to-humiliate-russia>.
- Novak, Benjamin. "Ukraine War Forces Hungary's Orban Into Political Contortions." *The New York Times*, The New York Times, 27 Feb. 2022,
<https://www.nytimes.com/2022/02/27/world/europe/ukraine-russia-hungary-orban.html>.
- Oatley, Thomas, et al. "The Political Economy of Global Finance: A Network Model." *Perspectives on Politics*, vol. 11, no. 1, 2013, pp. 133–153.,
<https://doi.org/10.1017/s1537592712003593>.
- Olsen, Jan M. *ABC News*, ABC News Network,
<https://abcnews.go.com/International/wireStory/russia-cutting-off-natural-gas-denmark-company-85103549>.
- O'Murchú, Seán Federico, et al. "Biden: 'Sanctions Never Deter' but the Maintaining of Them Is 'What Will Stop' Putin." *CNN*, Cable News Network, 25 Mar. 2022,

https://www.cnn.com/europe/live-news/ukraine-russia-putin-news-03-24-22/h_cb8166fde8d298568a8b858a41d7c261.

Oneal, John R., and Bruce M. Russett. "The Classical Liberals Were Right: Democracy, Interdependence, and Conflict, 1950-1985." *International Studies Quarterly*, vol. 41, no. 2, 1997, pp. 267–294., <https://doi.org/10.1111/1468-2478.00042>.

Oneal, John R., et al. "The Liberal Peace: Interdependence, Democracy, and International Conflict, 1950-85." *Journal of Peace Research*, vol. 33, no. 1, 1996, pp. 11–28., <https://doi.org/10.1177/0022343396033001002>.

Papayouanou, Paul A. "Economic Interdependence and the Balance of Power." *International Studies Quarterly*, vol. 41, no. 1, 1997, pp. 113–140., <https://doi.org/10.1111/0020-8833.00035>.

Pape, Robert A. "Why Economic Sanctions Do Not Work." *International Security*, vol. 22, no. 2, 1997, pp. 90–136., <https://doi.org/10.1162/isec.22.2.90>.

Pifer, Steven. "Heading for (Another) Ukraine-Russia Gas Fight?" *Brookings*, Brookings, 9 Mar. 2022, <https://www.brookings.edu/blog/order-from-chaos/2019/08/30/heading-for-another-ukraine-russia-gas-fight/>.

Pop, Valentina. "EU Leaders Agree More Russia Sanctions, but Save Some for Later." *Financial Times*, 25 Feb. 2022, <https://www.ft.com/content/8b99b33b-92b0-42f4-ac02-ecbc9fae4c4c>.

Prince, Todd. "The 'Nuclear Option': What Is Swift and What Happens If Russia Is Cut off from It?" *RadioFreeEurope/RadioLiberty*, The 'Nuclear Option': What Is SWIFT And What Happens If Russia Is Cut Off From It?, 9 Dec. 2021, <https://www.rferl.org/a/russia-swift-nuclear-option/31601868.html>.

Race, Michael. "Ukraine War: Russia Threatens to Stop Supplying Gas If Not Paid in Roubles."

BBC News, BBC, 31 Mar. 2022, <https://www.bbc.com/news/business-60945248>.

Rana, Waheeda. "Theory of Complex Interdependence: A Comparative Analysis of Realist ..."

International Journal of Business and Social Science, Feb. 2015, [https://www.e-](https://www.e-education.psu.edu/emsc302/sites/www.e-education.psu.edu/emsc302/files/ComplexInterdependenceArticle.pdf)

[education.psu.edu/emsc302/sites/www.e-](https://www.e-education.psu.edu/emsc302/sites/www.e-education.psu.edu/emsc302/files/ComplexInterdependenceArticle.pdf)

[education.psu.edu/emsc302/files/ComplexInterdependenceArticle.pdf](https://www.e-education.psu.edu/emsc302/files/ComplexInterdependenceArticle.pdf). PhD Scholar at

Quaid-i-Azam University Islamabad & Assistant Professor at International Islamic

University Islamabad

Rauhala, Emily, et al. "Russia Cuts off Gas to Poland, Bulgaria, Stoking Tensions with E.U."

The Washington Post, WP Company, 28 Apr. 2022,

[https://www.washingtonpost.com/world/2022/04/26/russia-cuts-gas-bulgaria-poland-](https://www.washingtonpost.com/world/2022/04/26/russia-cuts-gas-bulgaria-poland-gazprom/)

[gazprom/](https://www.washingtonpost.com/world/2022/04/26/russia-cuts-gas-bulgaria-poland-gazprom/).

Reuters. "EU Approves French Scheme to Support Companies Hit by Ukraine War." *Reuters*,

Thomson Reuters, 7 Apr. 2022, [https://www.reuters.com/world/europe/eu-approves-](https://www.reuters.com/world/europe/eu-approves-french-scheme-support-companies-hit-by-ukraine-war-2022-04-07/)

[french-scheme-support-companies-hit-by-ukraine-war-2022-04-07/](https://www.reuters.com/world/europe/eu-approves-french-scheme-support-companies-hit-by-ukraine-war-2022-04-07/).

Reuters. "Factbox: What Is China's Onshore Yuan Clearing and Settlement System Cips?"

Reuters, Thomson Reuters, 28 Feb. 2022, [https://www.reuters.com/markets/europe/what-](https://www.reuters.com/markets/europe/what-is-chinas-onshore-yuan-clearing-settlement-system-cips-2022-02-28/)

[is-chinas-onshore-yuan-clearing-settlement-system-cips-2022-02-28/](https://www.reuters.com/markets/europe/what-is-chinas-onshore-yuan-clearing-settlement-system-cips-2022-02-28/).

Reuters. "France's Macron Calls for Restraint in Words and Actions Regarding Ukraine

Conflict." *Reuters*, Thomson Reuters, 27 Mar. 2022,

[https://www.reuters.com/world/europe/frances-macron-calls-restraint-words-actions-](https://www.reuters.com/world/europe/frances-macron-calls-restraint-words-actions-regarding-ukraine-conflict-2022-03-27/)

[regarding-ukraine-conflict-2022-03-27/](https://www.reuters.com/world/europe/frances-macron-calls-restraint-words-actions-regarding-ukraine-conflict-2022-03-27/).

Reuters. “France's Macron: Russia's Putin Alone Chose War in Ukraine.” *Reuters*, Thomson Reuters, 3 Mar. 2022, <https://www.reuters.com/world/europe/frances-macron-russias-putin-alone-chose-war-ukraine-2022-03-02/>.

Reuters. “Hungary Must Radically Increase Its Defence Capabilities, PM Orban Says.” *Reuters*, Thomson Reuters, 1 July 2022, <https://www.reuters.com/world/europe/hungary-must-radically-increase-its-defence-capabilities-pm-orban-says-2022-07-01/>.

Reuters. “Scholz Defends Germany's Caution on Sending Heavy Arms to Ukraine.” *Reuters*, Thomson Reuters, 1 May 2022, <https://www.reuters.com/world/europe/scholz-defends-germanys-caution-sending-heavy-arms-ukraine-2022-05-01/>.

Reuters. “Timeline: The Events Leading up to Russia's Invasion of Ukraine.” *Reuters*, Thomson Reuters, 1 Mar. 2022, <https://www.reuters.com/world/europe/events-leading-up-russias-invasion-ukraine-2022-02-28/>.

Reuters. “Ukrainian No-Fly Zone Would End War Quicker, Says Polish Ambassador.” *Reuters*, Thomson Reuters, 10 Mar. 2022, <https://www.reuters.com/world/europe/ukrainian-no-fly-zone-would-end-war-quicker-says-polish-ambassador-2022-03-10/>.

Reuters. “Visiting Kyiv, Leaders of Poland and Baltic States Condemn Russia.” *Reuters*, Thomson Reuters, 13 Apr. 2022, <https://www.reuters.com/world/europe/leaders-poland-baltic-states-head-kyiv-2022-04-13/>.

RFE/RL. “Latvia's Defense Minister Defends Military Aid to Kyiv, Says West Not a Threat to Russia.” *RadioFreeEurope/RadioLiberty*, Latvia's Defense Minister Defends Military Aid To Kyiv, Says West Not A Threat To Russia, 24 Jan. 2022, <https://www.rferl.org/a/latvia-ukraine-russia-nato-weapons/31669295.html>.

RFE/RL. “Orban Calls for U.S.-Russia Talks on Ukraine War, Saying Kyiv Can't Win.”

RadioFreeEurope/RadioLiberty, Orban Calls For U.S.-Russia Talks On Ukraine War, Saying Kyiv Can't Win, 25 July 2022, <https://www.rferl.org/a/orban-ukraine-war-us-russia-talks/31956804.html>.

RFE/RL's Hungarian Service. “Russia to Consider Hungarian Request to Buy More Gas.”

RadioFreeEurope/RadioLiberty, Russia To Consider Hungarian Request To Buy More Gas, 21 July 2022, <https://www.rferl.org/a/hungary-to-drop-energy-price-caps-high-consumption-clients/31953528.html>.

RFE/RL's Russian Service. “Netherlands Becomes Latest Country to Be Cut off from Russian

Gas over Payment System.” *RadioFreeEurope/RadioLiberty*, Netherlands Becomes Latest Country To Be Cut Off From Russian Gas Over Payment System, 31 May 2022, <https://www.rferl.org/a/russia-netherlands-gas-cut-off-gasterra/31876781.html>.

RFE/RL's Ukrainian Service. “Ukraine Pushes Back after Hungary's Orban Attacks EU

Sanctions.” *RadioFreeEurope/RadioLiberty*, Ukraine Pushes Back After Hungary's Orban Attacks EU Sanctions, 15 July 2022, <https://www.rferl.org/a/ukraine-hungary-orban-attacks-eu-sanctions/31945176.html>.

Ripsman, Norrin M., and Jean-Marc F. Blanchard. “Commercial Liberalism under Fire:

Evidence from 1914 and 1936.” *Security Studies*, vol. 6, no. 2, 1996, pp. 4–50., <https://doi.org/10.1080/09636419608429305>.

Schuetze, Christopher F. “Germany's Leader Says a Boycott of Russian Energy Would Imperil

'Hundreds of Thousands of Jobs.'” *The New York Times*, The New York Times, 23 Mar. 2022, <https://www.nytimes.com/2022/03/23/business/olaf-scholz-russia-energy.html>.

Shambaugh IV, George E. “Dominance, Dependence, and Political Power: Tethering Technology in the 1980s and Today.” *International Studies Quarterly*, vol. 40, no. 4, 1996, p. 559., <https://doi.org/10.2307/2600891>.

Shambaugh, George. “Economic Warfare.” *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., <https://www.britannica.com/topic/economic-warfare>.

Siripurapu, Anshu. “The Dollar: The World's Currency.” *Council on Foreign Relations*, Council on Foreign Relations, <https://www.cfr.org/backgroundunder/dollar-worlds-currency>.

Sly, Liz. “Estonian Leader Urges Faster Help for Ukraine amid Signs of War Fatigue.” *The Washington Post*, WP Company, 16 June 2022, <https://www.washingtonpost.com/world/2022/06/16/estonia-kallas-ukraine-allies-aid/>.

Spike, Justin. “Hungary Announces 'State of Danger' over War in Ukraine.” *AP NEWS*, Associated Press, 24 May 2022, <https://apnews.com/article/russia-ukraine-hungary-government-and-politics-legislature-a84941c75996412128792824601a82a2>.

“Swift and Sanctions: Swift - the Global Provider of Secure Financial Messaging Services.” *SWIFT*, SWIFT, <https://www.swift.com/about-us/legal/compliance-0/swift-and-sanctions#what-is-swift?>

Szakacs, Gergely, and Natalia Zinets. “Tensions Mount between Ukraine and Hungary over Budapest's Russia Stance.” *Reuters*, Thomson Reuters, 7 Apr. 2022, <https://www.reuters.com/world/europe/ukraine-urges-hungary-get-right-side-history-over-russia-2022-04-07/>.

Tan, Huileng. “Russia's Economy Is on Track for Its Biggest Contraction in 3 Decades amid Sanctions over the Ukraine War.” *Business Insider*, Business Insider, 13 Apr. 2022,

<https://www.businessinsider.com/russia-economy-gdp-contraction-sanctions-energy-putin-ukraine-war-2022-4>.

TASS. “Russia and China Establishing Interaction of Financial Messaging Systems Outside Swift.” *TASS*, <https://tass.com/economy/1423101>.

TASS. “The Share of Messages via the Russian Analogue of SWIFT Increased by 1.8 Times.” *Tass.ru*, 18 Feb. 2021, <https://tass.ru/ekonomika/10731513?utm>. Translated on Deepl: <https://www.deepl.com/translator>

Tyler, Melissa Conley. “Ukraine: The View from Warsaw.” *The Interpreter*, The Interpreter, 29 May 2022, <https://www.lowyinstitute.org/the-interpreter/ukraine-view-warsaw>.

Udasin, Sharon. “Baltics Cut off Russian Gas, but Germany, EU Face Struggle.” *The Hill*, The Hill, 4 Apr. 2022, <https://thehill.com/policy/equilibrium-sustainability/3258744-baltics-cut-off-russian-gas-but-germany-eu-face-struggle/>.

Wagner, R. Harrison. “Economic Interdependence, Bargaining Power, and Political Influence.” *International Organization*, vol. 42, no. 3, 1988, pp. 461–483., <https://doi.org/10.1017/s0020818300027703>.

Ward, Alexander, and Joseph Gedeon. “What Biden Means by 'Sanctions Never Deter'.” *POLITICO*, 25 Mar. 2022, <https://www.politico.com/newsletters/national-security-daily/2022/03/25/what-biden-means-by-sanctions-never-deter-00020602>.

White House. “Remarks by President Biden on Russia's Unprovoked and Unjustified Attack on Ukraine.” *The White House*, The United States Government, 24 Feb. 2022, <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/02/24/remarks-by-president-biden-on-russias-unprovoked-and-unjustified-attack-on-ukraine/>.

Wright, Thomas J. *All Measures Short of War: The Contest for the 21st Century and the Future of American Power*. Yale University Press, 2018.

Zinets, Natalia. "Ukraine Seeks Stronger Sanctions as Russia Drops More Missiles on Cities." *Reuters*, Thomson Reuters, 7 Apr. 2022, <https://www.reuters.com/world/europe/ukraine-seeks-ruinous-sanctions-russia-amid-european-hesitancy-2022-04-06/>.