

The Weaponization of Trade

A study of modern trade conflicts from the mid-1900s to present

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Advisor: Markus Jaeger

hmj2115@columbia.edu

Lukas Feldhaus

lsf2128@columbia.edu

Yuxin Huang

yh3053@columbia.edu

Sherry Kim

sk4491@columbia.edu

Wonjae Kim

wk2316@columbia.edu

Joon Sung Lee

jl5232@columbia.edu

Daniel Marechal

dam2246@columbia.edu

Xinyi Sun

xs2345@columbia.edu

Samantha Weiss

s.weiss@columbia.edu

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1.0 Introduction

1.1 Abstract

Despite the historical trend towards trade liberalization, states have increasingly implemented protectionist trade policies, often to induce some political change. This report analyzes historical case studies of trade conflict since the 1940s, to distill insights regarding the introduction, evolution, and development of trade weaponization. Said insights are subsequently applied to present-day conflicts, to better understand this trend's continued evolution in geopolitics. Countries weaponize trade tools to impose economic pressure on a target, inducing a change in trade patterns in service of political or broadly-economic objectives. If the target country retaliates by also weaponizing trade, the conflict potentially escalates into a trade war. To understand the motives underlying trade wars, we have organized our case studies by the following variables: country leadership, administratively-led vs. public-led policies, political and geo-strategic goals vs. economic concerns, and implications for technical development. Other variables considered for an analysis of the results include: within vs. across alliances, symmetric vs. asymmetric economic/political/military capabilities. We will consider trade weaponization within the institutional context of international trade organizations and regimes, namely the WTO and GATT. With these variables, we aim to specify the factors that provided the winners with an upper hand, thereby creating a foundation for the team to assess ongoing and future trade wars.

1.2 Executive summary

Over the last three years, rhetoric about trade wars has become more salient as the United States (US) and China - two major economic powers - have engaged in tariff escalations within the context of broader economic and financial conflict. Although disputes involving trade have been taking place periodically since Ancient Greece, there has been growing concern that the current structure of global trade is more conducive to **trade weaponization**, defined as the employment of trade tools to induce a trade partner to change its practices in any issue-area (including economic policy and diplomatic relations) by exploiting its economic vulnerabilities. Albeit usually welfare-enhancing, international trade also generates relations of asymmetric interdependence; one party may accordingly lose more than the other if economic ties are suspended. This makes the weaponization of trade possible.

This report proposes a theoretical framework to analyze the weaponization of trade, which draws mainly from the Realist perspective of trade and interdependence. We employ quantitative analysis to bolster the insights gleaned from an extensive literature review. Compiled data reflects potential power sources of the involved parties – such as GDP, population size, and bilateral trade as a share of GDP – as a proxy for the level of vulnerability. As corroborated by the case studies, trade weaponization is usually initiated by the less vulnerable party, except when the aggressor holds a dominant position in the market of certain strategic goods (i.e. oil and rare earth).

A quantitative approach alone is insufficient for analyzing the outcomes of trade weaponization. Therefore, we introduce four axes of qualitative analysis: actors' vulnerability, objectives, diplomatic ties, and international institutions. First, to assess the parties' **vulnerability**

to trade weaponization, we analyze the political strength of domestic interest groups negatively affected by trade restrictions – the “commercial fifth-columns.” Second, we categorize **objectives** as predominantly economic or geopolitical. We argue that when it comes to geopolitical issues, especially security-related ones, the “pain threshold” of the aggressee tends to be higher, and so the weaponization of trade is more likely to escalate to other areas of bilateral relations and even lead to war. Purely economic disputes, however, tend to be settled within an institutional framework. Third, we assess the **status of diplomatic relations** between the parties and classify it as either inter-alliance or across-alliance. States tend to consider “security externalities” when it comes to weaponizing trade. This explains why trade conflict between allied countries is less likely to escalate, as the parties are not willing to inflict too much economic pain on a partner on whom its national security relies. Finally, we consider that a strong **multilateral trade regime** can facilitate negotiations. This is more likely in low-stakes economic conflicts with no relevant geostrategic repercussions.

To test our framework, we selected eleven trade disputes that occurred throughout the 20th century. Our objective was not to draw a random sample, but rather to choose a group of cases with enough variation in the aforementioned variables. Since our framework includes several non-hierarchical components, it is not meant to predict the onset or the outcomes of episodes of trade weaponization. Still, it proved successful in helping explain the selected cases. We found that states weaponize trade when they feel strongly about their objective - either due to pressure from domestic interest groups or because of high-level strategic interest. Moreover, weaponization is likely when the asymmetric interdependence plays in their favor. Historical evidence corroborates the relevance of our four analytical axes in the evolution of trade disputes.

With a theoretical framework and the conclusions we derived from the case studies, we briefly present an assessment of the evolution of structural variables in the international system, before proceeding to an analysis of two on-going trade conflicts: the US-China trade war and the Japan-Korea trade war. Our view is that international trade is now much more complex than it was until the early-2000s, with high-level economic interdependence among countries in different security alliances and in different stages of economic development. This is different from the mainly Transatlantic trade during the early years of the GATT. This situation is inherently unstable - reflecting a unipolar world that emerged from the Cold War that no longer exists. Eventually, countries will seek to reduce their vulnerabilities. However, while the adjustment takes place, trade weaponization tends to occur more often leading to less predictable outcomes, especially when high-stake political objectives are on the table. The US-China trade war exemplifies this trend. As the conflict includes high stake objectives - potentially, economic and technological dominance - and involves non-allied countries, it tends to escalate in spite of periodic truces, with almost no influence of the WTO. The case of Japan and South Korea is different since, albeit rivals in some specific issues like historical grievances, both parties are in the same security alliance. Their willingness to inflict reciprocal damage is limited. Moreover, as medium-sized countries in the system that rely a lot on an open trade system, they are more likely to accept WTO arbitration rather than break up with the multilateral trade regime.

1.3 Introduction

Rhetoric regarding trade wars has become more salient in recent years. Nonetheless, disputes involving restrictions on cross-border exchanges of goods and services are not novel phenomenon. In fact, trade conflict can be traced back to the Peloponnesian War, when Athens banned the Mergarians - citizens from Mergare, a Sparta ally - from its ports in 430s BC in an episode that is recounted by Thucydides in the *History of Peloponnesian War* (Pomeroy et al., 1999). Still, it seems that an unprecedented network of economic interdependence - sometimes among countries engaging in increasing geopolitical rivalry - may create a structural situation that is more conducive to the political exploitation of trade restrictions. It is therefore necessary to build an analytical framework that allows us to interpret episodes of trade weaponization.

In order to build such a framework, we begin with a comprehensive literature review, covering prior conceptualizations of trade wars and trade weaponization, a brief overview of the economic and political economy theories on international trade, and a contextualization of the academic debate on foreign trade, interdependence, and international regimes. Then, drawing mainly on the arguments presented by Hirschman (1980) and Krasner (1976), we propose an analytical model based on four axes: 1) objectives of the aggressor; 2) relative vulnerability of the parties; 3) diplomatic relations between the two sides; 4) role of international organizations.

We test and calibrate said framework by using it to interpret eleven historical episodes of trade weaponization. The selection of the sample of cases was not meant to be random; rather, it sought to cover situations with enough vulnerabilities of the variables related with our analytical stages. Our analytical approach was proved successful in providing very insightful interpretations of the revisited historical episodes.

In the following part of this report, we will employ our theoretical and empirical findings to the analysis of ongoing trade war. In order to do that, we will start with an overview of the historical evolution of the world trade system, seeking to identify changes in the structural variables that underpin it. Afterwards, we will approach the on-going US-China and Japan-Korea trade wars. Our basic conclusion is that the former is more likely to escalate, and even spillover to other domains of bilateral relations, whereas the latter tends to be settled in an institutional framework.

2.0 Literature review

Foreign Trade, Protectionism, and Power Politics

Since the end of World War II, global trade has grown at an unprecedented pace. From 1950 to 2007, trade grew by 6.2% on average, far exceeding GDP growth rate (World Trade Organization, 2008). From 4.16% in 1945, the value of total exports as a share of global GDP peaked at 26.23% in 2007 (Ortiz-Ospina). These six decades of trade liberalization coincided with very substantial GDP growth and poverty reduction. Indeed, as we will see, global economic integration can enhance economic performance through several channels such as increased competition and economies of scale.

In spite of the benefits of international trade, the world seems to be on the verge of a reversal in the liberalizing trend embodied by the 1947 General Agreement of Trade and Tariffs (GATT). The collapse of the Doha Round, the shutdown of the WTO Appellate Body, and a wave of “trade wars” alongside renewed protectionist discourse seem to indicate that the years of trade liberalization may have come to a halt. Moreover, countries have been increasingly using - or threatening to use - trade tools to force their economic partners to accept their political or economic demands; this is trade weaponization. In what follows, we will explore the literature on trade, protectionism, and interdependence from a multidisciplinary perspective, seeking to understand what drives countries to turn to protectionism and, more importantly for the purposes of this report, to trade weaponization.

In the first part of this section, we will discuss terminology, focusing on the debate over what is loosely called a “trade war,” and proposing our definition of trade weaponization. In the second part, we will briefly discuss the case for trade as elaborated by economic theory. In the third part, we will explore two sets of arguments that seek to explain protectionism: the first invoking economic justifications for activist trade policy, and the second focusing on the role of interest groups in the determination of trade policy. Understanding why countries adopt certain practices regarding imports and exports is important because trade weaponization usually arises in response to activist trade policy. In the fourth part of this section, we will focus on the international relations debate on trade and interdependence. As we shall see, the Liberal school views trade as a force for peace, as it increases the opportunity cost of war. On the other hand, the Realist school suggests the opposite: interdependence creates vulnerabilities that can be politically exploited, which can lead the weaker side to resort to military means to reduce its vulnerability. The idea of asymmetric interdependence provides valuable insights about how countries can exploit vulnerabilities stemming from trade in order to pursue economic or political objectives. Finally, in the fifth part, we will discuss the role of international regimes in constraining trade weaponization.

2.1 Concepts and definitions

The term “trade war” is broad and has loosely been applied in a variety of ways and contexts over the years, particularly in the media and in the political debate. Broadly speaking, any dispute involving trade can be called a trade war, analogizing armed conflict aiming to inflame nationalist discourses. In the academic literature, the concept appears usually in reference to episodes of escalating protectionist measures primarily motivated by economic concerns. For the scope of our paper, we have opted to narrow our focus to the analysis of “trade weaponization,” which we define as the adoption of trade restrictions aiming to induce changes in the behavior of a trading partner in any domain of bilateral economic and political relations. It is worth illustrating with an example. Country B may increase tariffs to either boost its growth prospects or please a given politically powerful domestic sector; this is not trade weaponization, since its objective is not to change policies of other countries but only to pursue a domestic economic or distributive goal. If country A, however, retaliates against B to pressure tariff removal, that is trade weaponization; this can also lead to a trade war. For the rest of this paper, we will be using the terms “trade war,” “trade disputes,” or “trade conflicts” interchangeably, with greater emphasis on the ways in which the conflicts employ methods of trade weaponization.

Before further elaborating on the concept of trade weaponization, it is worth going through the use of the concept of “trade war” in academic literature. A World Trade Institute (WTI) report defines “trade war” as a “breakdown in cooperative trading relations between countries, or coalitions of countries, involving substantial increased protectionism across a range of goods and services” (Bekkers et al., 2019). They distinguish between “trade wars” and “trade skirmishes,” which are defined as relatively small-scale trade disputes that are often sectoral in nature and are resolved through the WTO’s dispute settlement mechanism as well as a host of other preferential trading arrangements. Tracing back its roots to the earliest forms of mercantilism, trade wars are considered comprehensively as that which may be a part of hostile relations between countries more generally – thereby stressing a need to clarify between each party and decision maker’s objective function vis-à-vis commercial objectives versus geostrategic objectives. Although we will not be distinguishing “trade war” and “trade skirmishes,” we will classify trade weaponization based on their underlying objectives, as we will explain in the theoretical framework.

John Conybeare takes a narrower approach by defining “trade wars” primarily with regards to economic objectives “directly related to the traded goods or service sectors of their economies, and where the means used are restrictions on the free flow of goods and services” (Finger, 1988). He distinguishes between two types of bilateral trade wars: (1) trade wars between two equally large countries represented as a prisoner’s dilemma scenario, where cooperation is beneficial only when both parties participate and non-cooperation can be a dominating strategy, but if both parties implement a strategy of non-cooperation, both parties lose (e.g. 1962 Chicken War between the US and the EEC); and (2) trade wars between a relatively large country and a smaller country, whereby the outcome results in the large country benefiting and the small country losing, facing a decrease in overall welfare (e.g. 1886 France-Italy conflict, 1892 France-Switzerland conflict, 1893 Germany-Russia conflict).

Along similar lines, Mark Melatos, Pascal Raimondos-Moller, and Matthew Gibson define a “trade war” as occurring “when all countries choose levels of protection that maximize their own welfare given the trade barriers of other nations” (Melatos et al. 2007). They apply optimal tariff theory to specify the circumstances under which a country is able to win a trade war, arguing that a country wins a trade war if it experiences higher welfare in a world of optimal protection than it would under free trade. By simulating a 2-country, 2-good, 2-factor general equilibrium model of world trade, they conclude that: (1) a country sufficiently larger than its opposing party will win in a trade war; (2) in a Heckscher-Ohlin model of trade, the magnitude of a country’s welfare gains or losses from a trade war will shrink the more similar its relative factor endowments are to those of its trading partner; (3) a country with a sufficiently large degree of substitutability in its preferences will win a trade war; (4) a small country can win a trade war against a larger country if its elasticity of substitution in consumption of the traded goods is sufficiently high relative to that of its rival.

As the literature suggests, the concept of “trade war” is generally associated with the escalation of tariffs for the pursuit of economic objectives, such as terms of trade improvements. As previously suggested, the concept of “trade weaponization” differs from the above definitions of a “trade war” in the sense that it refers to the objective of a country to push for a change in a trading partner’s policies, which do not necessarily have to be strictly in the domain of foreign trade. For example, trade can be weaponized to induce a country to change its security alliances,

such as in the case of the 1973 oil embargo. Building on the notion that trade has increasingly shifted from an “implicit tool of coercion to an explicit means through which foreign policy objectives are achieved”, Rebecca Harding (2017) considers trade weaponization as the transformation of trade from a benign instrument to a “tool of strategic and political influence.” Although our definition is similar, it is not identical since we conceive that the objective of trade weaponization is necessarily to push for a change in the behavior of the targeted country - instead loosening the reference to “strategic and political influence.” Our definition of trade weaponization is derived from the literature on trade and interdependence, particularly from the Realist perspective.

Several economic policy instruments can have relevant effects on trade. For example, exchange rate manipulation and Foreign Direct Investment (FDI) restrictions can have a direct impact on bilateral trade. However, for the purposes of this report, we are considering as trade tools only the traditional imports and export restrictions, namely tariffs and non-tariff barriers such as quantitative restrictions (bans and quotas) as well as technical barriers.

Key definition	
Weaponization of trade	The use, or threat of use, of trade tools to exploit economic vulnerabilities and asymmetries in order to force a change in the behavior of a country, in any domain of bilateral and/or political relations

2.2 The gains from trade

Until the 18th century, international trade was viewed as a negative-sum game. In the Mercantilist view, what mattered for the wealth of nations was their stock of gold – which could only increase if they ran trade surpluses. Therefore, only one side could gain. In 1776, Adam Smith came up with the notion of absolute advantage, implying that two countries can be better off if they specialize in the production of the goods they produce more efficiently. In the early 19th century, David Ricardo produced the definitive argument for free trade: the theory of comparative advantage. He demonstrated that two countries benefit from trade – in the sense that they can afford to buy more goods – even if one of them produces all goods more efficiently. More recently, economists have been suggesting extra benefits from trade that go beyond efficiency enhancement stemming from specialization. For example, incorporating the assumption of increasing returns to scale and product differentiation, trade promotes a reduction in product costs and a fall in prices, combined with an increase in the variety of goods and services available to consumers (Feenstra, 2015; Irwin, 2015). With all these benefits from trade, the puzzling question is why countries resort to protectionism and trade weaponization.

2.3 What drives countries to adopt protectionist policies?

Although international trade offers mutual benefits and opportunities for economic growth, it is nearly impossible to disentangle the political implications of trade policy. The reasons often cited for states’ protectionist behavior can be largely broken down into three camps: economic arguments, society-centered arguments, and national security arguments.

2.3.1 Economic arguments

Initially proposed by Alexander Hamilton, the **infant industry protection** argument has been guiding trade policy for centuries. As demonstrated by Ha-Joon Chang (2010), industrialized countries such as the United Kingdom (UK) and the US applied some type of *avant-la-lettre* infant industry protection in the early phases of their development trajectory. More recently, newly-industrialized countries such as South Korea and Brazil also relied on some degree of infant industry protection in the pursuit of their catching up strategy (P. Evans, 1995).

In its modern economic fashion, the infant industry argument posits that protecting industries with high externalities may be beneficial for the entire economy. By accumulating knowledge and “learning-by-doing,” a firm refines its production techniques, and its production costs arguably reduce over time (Krugman, 2015). Thus, with infant industry protection, the government’s temporary protection for burgeoning industries arguably helps them gain experience and “level the playing field” with more established competitors who have already attained a higher level of accumulated output.

Expanding the infant industry argument, Peter Evans (1995) suggests that countries should implement policies to protect specific sectors - namely, those which are technology intensive - that can create “multidimensional conspiracies” in favor of development, “inducing entrepreneurial energies, creating positives spillovers to the rest of the economy, and molding political interest groups into a development coalition”. From this perspective, a country should not passively accept its “comparative advantages”, since it often reduces “the prospects of progressive change”; rather, it should aim at reaching qualitative improvements in its position in the international division of labor. Therefore, active industrial policy, consisting of infant industry protection and subsidies, can play an essential role in a country's development trajectory.

Another argument in favor of active trade policy relies on the excess returns reaped by firms in oligopolistic markets. According to the **strategic trade policy** argument, governments attempt to skew the markup returns in an oligopolistic international market towards domestic firms, either by changing the position of individual firms or by changing the relative position of their economies in the international division of labor (Krugman, 1996). Governments often apply strategic trade as a means to support and protect the growth of domestic high-technology firms. In fact, “government intervention can help new firms enter an established high-technology industry to challenge, and eventually compete with, established firms” (Oatley, 2015).

However, Ralph Ossa proves that although a country can gain at the other’s expense by imposing unilateral optimal tariffs through strategic trade policy, the opposing country is likely to retaliate, and following an escalation of conflict, both countries will lose in a prisoners’ dilemma-type scenario, like the Boeing-Airbus case for example (Ossa, 2014). In order to avoid such a mutually harmful scenario, Krugman suggests establishing “rules of the game” for trade policy that keep harmful actions to a minimum and that these rules be clearly defined (Krugman, 1987).

Another motivation for protectionism - summarized in the **optimal tariff theory** - suggests that a country can improve its terms of trade by imposing tariffs. Terms of trade is a relative

average price, calculated as the price of a country's exports over the price of its imports. Theoretically if a country were to raise its terms of trade, that country's imports would become relatively cheaper than its exports, allowing it to buy more imports given its level of exports. From this idea stems the optimal tariff theory, which argues that a relatively large country can positively affect its terms of trade by imposing a tariff for some key commodity exports that it maintains monopoly power over in the market. However, "few countries have the clear-cut ability to manipulate their terms of trade to much advantage" (Irwin, 2015) and the terms of trade as a justification for protectionist trade policy is largely ineffective in practice (Krugman, 2015) particularly because unilateral optimal tariffs are likely to result in retaliatory tariffs from an opposing, large country, ultimately leading to an escalation of conflict that hurts both sides. The notion of "optimal tariff warfare" simultaneously making both countries worse off may also serve as potential justification for a rules-based international trade regime (i.e. GATT/WTO).

Strictly economic objectives - that is, aiming to improve the aggregate income of a country - underlie some justifications for protectionism. Yet it is important to note that these policies can be *beggar-thy-neighbor*, in the sense that they make other countries - and some interest groups within these countries - worse-off. Therefore, activist trade policies - aiming to protect infant industries, to secure the position of domestic firms in oligopolistic markets, or to improve terms of trade - usually trigger the reaction of third-countries, which can resort to trade restrictions in retaliation, giving rise to episodes of trade weaponization. To be clear, activist trade policy is not trade weaponization - since they do not aim at forcing other countries to change their policies. However, trade policies implemented by country B can trigger the reaction of country A, and so A can respond with trade tools aiming to push B to change its policies.

2.3.2 Society-centered explanations for protectionism

The famous Heckscher-Ohlin model demonstrates that foreign trade increases the aggregate welfare of the two parties engaging in it - provided that some assumptions are met. A consequence of the model - the Stolper-Samuelson Theorem - implies that these gains are not evenly distributed within countries. The Stolper-Samuelson Theorem demonstrates that free trade benefits the factor of production that is relatively abundant and harms the locally scarce factor, regardless of the industry in which it is employed. As a result, the holders of the scarce factor of production (e.g. labor) will tend to oppose trade liberalization, while holders of the abundant factor of production (e.g. capital) will tend to promote trade liberalization. Ronald Rogowski applies the Stolper-Samuelson theorem to the analysis of political coalition formation, making the case that the relatively abundant factors of production will form a coalition in favor of trade liberalization, while the relatively scarce factors oppose greater liberalization. Stephen Magee makes an additional clarification to the Stolper-Samuelson theorem by accounting for sector-specific divisions along domestic trade policy constituents. His empirical analysis highlights cases where different factors of production within one industry united to oppose alliances of factors of production from different, sometimes opposing, industries (Brawley, 2005).

The domestic distributive effects of trade have relevant implications for the domestic political economy. Trade policies are also formulated to appease domestic interest groups or to raise the welfare of specific groups rather than the country in aggregate. Grossman and Helpman, for instance, apply the role of domestic political agendas to trade policy under the assumption that

national leaders are concerned not only with maximizing welfare but also with collecting campaign contributions from special interest groups (Grossman, 1995). In another empirical study, Mayer shows that voters' preferences affect trade policy formation (Mayer, 1984).

Robert Putnam's (1988) argument that the politics of international negotiations can be viewed as a two-level game is also applicable to trade: "at the national level, domestic groups pursue their interests by pressuring the government to adopt favorable policies, and politicians seek power by constructing coalitions among these groups; at the international level, national governments seek to maximize their own ability to satisfy domestic pressures, while minimizing the adverse consequences of foreign dependents." In order for a trade deal to be ratified, agreement must be reached at both levels of negotiation.

Thus, these types of society-centered explanations for protectionism help inform the role of domestic political institutions in our analysis of trade conflicts, by indicating who gains and who loses when a given trade policy is implemented and can be useful in shedding light on the motivations of countries to weaponize trade and to respond to attempts of trade weaponization. In our analytical framework, we will consider that if strong domestic interest groups have a high stake in trade disputes - losing or gaining from a given trade restrictions - that can influence the outcome of the conflict, as we will explain in detail in the theoretical framework.

2.3.3 National security arguments

The national security argument maintains that protectionism is justifiable when protecting domestic industries that produce defense-related goods, thereby ensuring its self-sustainability in the case of war. Origins of this argument can be traced back to 1776, when Adam Smith named national defense as one of the two justifications for engaging in domestic industry protectionism: "There seem, however, to be two cases in which it will generally be advantageous to lay some burden upon foreign for the encouragement of domestic industry. The first is when some particular sort of industry is necessary for the defence of the country" (Smith, 1776). Smith argues that the British Navigation Acts, which prohibited imports on foreign ships, were useful for keeping domestic ships ready in the case of possible war. He also suggests that it may be justifiable for a country to subsidize certain strategic defense-related domestic industries (e.g. gunpowder manufacturing).

The GATT/WTO legal framework takes the national security argument into account. Article XXI outlines the security exception that states can take permissible protectionist action in cases which it "considers necessary for the protection of its essential security interests" (WTO, "Article XXI"). The WTO's history of case rulings indicates that there is a general understanding that the article's exception should not be so broad as to allow for countries to "under the guise of security, put on measures which really have a commercial purpose." However, one common critique of the WTO's framework is that it has failed to properly define the exception's boundaries of what properly constitute an "essential security interest," and the argument's scope leaves too much room for interpretation.

There is a degree of debate over the extent and scope to which the national security argument ought to be applied, while some argue that its existence itself should not be permissible.

Others claim that “the question is not whether domestic firms producing products that actually go into national defense should be protected, but whether products consumed by civilians should also be protected at a net cost to the entire country” (Cheng, 26). With the increasing prevalence of trade weaponization, the scope of our report falls within the broader debate surrounding the national security argument.

Traditional explanations for protectionism	
Economic arguments	<p>1. Infant industry: tariffs to protect burgeoning industries from competition of mature industrialized countries</p> <p>2. Optimal tariff: a large country reduce the world price of imported goods by applying an “optimal tariff”, improving its terms of trade</p> <p>3. Strategic trade policy: a country can help domestic firms to get into oligopolistic markets (and, thus, to get markup returns) by granting exports subsidies</p>
Society-centered approach	Trade-liberalization is welfare-enhancing but it brings about losses to some sectoral groups, which will try to influence the making of trade policy and skew it to favor protectionist
National security concerns	Countries seek a certain degree of autonomy in the production of goods and services that are essential for their national defense (more broadly, concerns about economic vulnerabilities and technological leadership can also lead to protectionism)

2.4 Trade, interdependence, and power politics

2.4.1 The Liberal view: trade as a force for peace

As detailed above, economic theory suggests that trade is welfare enhancing. Drawing upon the lessons of Smith and Ricardo, John Stuart Mill went further and argued that international trade is also a force for global peace, as it creates interdependence among nations (apud Hirschman, 1980). In a classic pre-war pamphlet, Norman Angel (2011) argued that in a world in which prosperity comes from economic relations – through trade and credit – that extend beyond political frontiers, “military power is socially and economically futile.”

Drawing upon these optimistic views of trade and economic interdependence, the neoliberal tradition in international relations theory argues that growing economic interdependence between states reduces the likelihood of conflict. (Keohane and Nye 1977, 1987, 1998; Keohane, 2002; Doyle, 1986). Power is derived from economic gains rather than solely from military superiority. Since war necessarily leads to the interruption of cross-borders exchanges of goods

and services, and, in this sense, it is welfare destructive, starting them is highly costly for states. As summarized by (Copeland, 2014), “the opportunity costs of waging war are high when trade levels are high, and this serves to restrain actors who might otherwise have an incentive for war.”

In the same vein, John R. Oneal and Bruce Russett’s (1999, 2001) famous “Kantian Triangle” predicts that perpetual peace could be achieved by interdependence, democracy, and international regimes. Similarly, Rosecrance (1986) argues that the growing economic interdependence has effectively transformed states into “trading states” that opt for more trade rather than military power for national advancements. Drawing on the examples of the 1973 Oil Crisis, he argues that the increasing trading options can lead to more peace and that military and territorial expansion as a state’s option for advancement have been diminished.

A more recent body of literature grounded in the Liberal perspective relaxed the assumption that the sovereign state behaves as a unitary actor. In this approach, trade benefits certain groups within nations, and these groups have a vested interest in the maintenance of the status quo. In this sense, as suggested by McDonald (apud (Copeland, 2014) , trade lowers the probability of armed conflict only for the liberal capitalist state, because in those special interests potentially affected by a trade suspension can operate as strong pressure groups.

2.4.2 The Realist view: interdependence and war

Even though the Realist perspective does not contend that foreign trade is welfare enhancing, it emphasizes a fact that the Liberal perspective overlooks: Precisely because trade entails economic gains, countries can inflict economic pain in their trade partners by interrupting their own exports and imports (see, for example, Waltz (2010), Hirschman (1980), and Gilpin (2001). Indeed, a sudden stoppage in trade “obliges the other countries to find alternative markets and sources of supply and, should this prove impossible, it forces upon them economic adjustments and lasting impoverishment” (Hirschman, 1980).

Bringing a closer look into the structural variables and economic interdependence propelled by trade, Waltz (2010) argues that economic interdependence fosters conflict rather than bringing peace as nations seek to hedge against growing dependence on other nations. Waltz further argues that interdependence is not received equally among nations and that the concept of interdependence should be regarded as “vulnerability” rather than “sensitivity.”

While growing interdependence would lead states to become more sensitive to external economic conditions, because costs adjust to the market at an increasing rate, states do not necessarily become more vulnerable to external conditions. The level of a vulnerability is thus not determined by economics alone but by the political variable as well. Waltz argues that interdependence suggests some level of reciprocity among states and a state’s reliance on others’ strengths that could impact domestic politics and economy. Simply put, states are interdependent if they depend on each other equally, and when the cost of breaking the economic relations, naturally trade, is equal for all parties. In an anarchical system that the international order is, according to Waltz, states are interdependent on an unequal level, which provides a state with more power room to sever economic relations as it sees fit. In the end, states are all constrained to some level but not equally.

Indeed, the idea of asymmetric interdependence, initially proposed by (Hirschman, 1980) and then further elaborated by other authors in the Realist tradition, such as Waltz, can help us to understand why countries engage in trade disputes and it will be a key concept in the rest of this report. Since trade is welfare enhancing, its reduction brings about losses to both sides - except for the special case of the optimal tariff, but even then the gains can be annulated if it triggers the retaliation from other parties. Stated otherwise, trade weaponization is - at least in most of the cases - costly for the aggressor nation too. For example, in 2018, the United States generated economic uncertainty, risk of inflation, and supply chain disruptions, in a bid to exert economic pressure over China. Why do countries accept this type of welfare losses? Gains from trade can be - and usually are - asymmetrical: A and B benefit from trade B can benefit more than A. Under these circumstances, A can inflict more pain to B than to itself it decides to shut down their trade relations. Therefore, the asymmetric interdependence concept provides a neat logic for trade weaponization: if country A can inflict more harm to B than to itself, B is vulnerable to A and, hence, a potential target of trade weaponization by A.

There is, however, a paradox in this argument. In the Realist view, the core objective of sovereign states is to maximize their own security. Therefore, what matters the most for them is their relative position - that is, their strength vis-à-vis competing countries (Gilpin, 2001). Following a strict security-maximization strategy, A would not accept to trade with B. From B's perspective, the relationship is also potentially harmful, since it exposes it to the influence of A. Therefore, there would not be any trade between sovereign states - which is obviously not sustained by reality.

To address the apparent contradiction between the pursuit of opulence - which would prescribe complete trade liberalization - and defense goals - which would drive countries to complete autarky - the realists argue that economic puissance is a precondition for political power, since "without a strong and vibrant economy, great power cannot sustain their position in the system" (Copeland, 2014). To fix ideas, let us assume that we have an international system with three countries. If country A decides not to trade at all, fearing either the relative losses or vulnerabilities, it gives up reaping the absolute benefits from trade, so it gains zero. Countries B and C, though, do trade with each other, in an asymmetric relationship. If B gains 3 and C gains 2, country A has a relative loss vis-à-vis both B and C, so its strategy is not optimal from the perspective of relative gains. Therefore, countries do engage in trade, creating a network of interdependence and vulnerabilities that can be politically exploited and even lead to armed conflict - rather than boosting peaceful relationships.

Still, countries weigh the economic gains and increased vulnerabilities when it comes to their trade policies and the choice of their trade partners. Indeed, (Krasner, 1976), an important neo-realist scholar associated with the Hegemonic Stability Theory, argues that sovereign "states seek a broad range of goals", namely: economic growth and aggregate national income, political power, and domestic stability. Trade can affect these objectives differently depending on "the relative size and economic development of states" in the international system. For example, let us denote two large rich countries by the letter A and B. They both have an abundant endowment of production factors, adequate production scale, and essential natural resources, so they can do relatively well without trade. When it comes to small countries - denoted C and D - they usually

depend much more on trade for their economic development and, hence, for their domestic stability. Therefore, they tend to accept a certain level of political vulnerability vis-a-vis a dominant power. With this framework, Krasner concludes that an open trade regime is more likely to exist in a hegemonic system, with a single dominant power and a multitude of smaller countries. This is the setting that saw the rise of the GATT/WTO system, centered on the economic and political leadership of the United States. The below table summarizes the conclusions of Krasner's model, for different structures of the international system. This model is useful not only to evaluate the evolution of structures that underpin the international trade system, but also to understand the propensity of countries to engage in bilateral trade based on a multidimensional assessment of costs and benefits. Therefore, the model developed by Krasner will be an essential building for our analysis.

Probability of an open trading structure with different distributions of potential economic power				
		Size of states		
		Relatively equal		Very unequal
		Small	Large	
Level of economic development	Equal	Moderate-high	Low-moderate	High
	Unequal	Moderate	Low	Moderate-high

In a similar vein, (Hirschman, 1980) suggests that powerful countries tend to consider strategic aspects when establishing their trade partnership, aiming “to create conditions which make the interruption of trade of much graver concern to its trading partners than to itself”. Since “a stoppage of trade would [...] generally cause much more real loss to the poor than to the rich nation”, great powers seek to limit its trade with other mighty countries “to a certain maximum limit which it will think unsafe to exceed” and to “direct trade toward poor countries” (Hirschman, 1980). According to this view, and in line with Krasner's argument, a multipolar world would tend to be split into different spheres of influence when it comes to trade, each with a great power and its satellite subject countries – similarly to the setting of the age of colonialism.

Another relevant Realist view on trade comes from (Gowa & Mansfield, 1993). Their argument is built upon the security externalities of trade. Concurring that trade “enhances the potential military power of any country that engages in it”, the authors argue that “trade with an adversary produces a security diseconomy; trade with an ally produces a positive externality”. They try to explain the adoption of free trade policy with these assumptions. Since, by trading with an ally, country A obtains a benefit for itself and for a member of its security alliance, the aggregate gains from trade are higher and so free trade is more likely, whereas the opposite is also true.

Moreover, the argument indicates that trading with an adversary may create vulnerabilities that countries prefer to minimize.

2.4.3 Trade expectations theory

An interesting model that partially incorporates the Realist perspective includes “trade expectations” as a key explanatory variable. Concurring that interdependence leads to vulnerabilities and that these vulnerabilities can still be accepted given the economic benefit that they promote, (Copeland, 2014) argues that “expectations of the future trade and investment environment [...] will push states towards either relatively peaceful behavior or hardline policies and war”. To state it differently, leaders incorporate in their calculus an assessment of the probability of a sudden cut-off in their access to vital goods and markets. In this sense, B will accept some vulnerabilities if country A presents itself as a reliable partner and so there can be steady trade even among great powers – such as among European countries in the 1920s. Expectations, though, can rapidly shift. If A signals that it can impose restrictions to its trade with B (for example, because B, benefiting from relative gains, starts to look more threatening), the latter will “worry about its ability to access the raw materials, investments, and markets needed to sustain its economic growth”. This is to say that B’s expectations regarding trade with A will fall, so it will take actions to reduce its economic vulnerability by turning to other economic partners, sometimes within the A’s sphere of influence or even to by securing markets and supplies through armed interventions. To illustrate his argument, Copeland refers to the United States-Japan conflict in 1941. When the United States imposed an embargo against Japan in 1941, feeling threatened by Japan’s emergency – it triggered a spiral that ended up in full-blown war. Feeling economically vulnerable, Japan started a campaign to achieve economic self-sufficiency by conquering new territories in Southeast Asia, which eventually led to Pearl Harbor.

Although the narrative is compelling, “trade expectations” is a vague concept that can ultimately be manipulated to make any real world events fit into the mode. For example, the lack of trade between the United States and the Soviet Union and the trade between the United States and China can both be loosely explained *ex post* by recurring to the concept, in a tautological way. It seems to us that it is more useful to refer to structural variables in the international system - namely, the relative size of the most important players - to understand the evolution of the trade system and trade weaponization, in line with the Realist view. In this sense, trade expectations can be seen as an endogenous variable.

Foreign trade in International Relations Theory

Neoliberal view: interdependence is a force for peace since it increases the opportunity cost of war (interruption of welfare enhancing trade flows)

Neorealist view: countries engage in trade because economic gains are important for military power; economic interdependence entail political vulnerabilities that can be exploited

Trade expectations theory: countries accept some degree of economic interdependence, but if they feel threatened about being excluded from international trade they will seek to reduce their vulnerabilities - sometimes turning to armed means

2.5 The role of institutions

The debate about cooperation in the anarchic system is one of the most prolific in the field of international relations. As we indicated in section 2.3, countries have incentives to implement trade policies that go against the interest of their trade partners, either in response to domestic sector interests or in the pursuit of aggregate economic benefits. If A decides to impose a tariff on imports from B or to subsidize exports to B, B would retaliate, in a way that causes both sides to lose. This is represented in a prisoners' dilemma scenario - in which free-trade is the cooperative behavior and protectionism is defection. In the Nash equilibrium - in which each player maximizes their gains given the expected play of its opponent - both countries would resort to protectionism, in a solution that is Pareto suboptimal - since A and B would gain if they move to the cooperative solution.

		Country A	
		Free-trade	Protectionism
Country B	Free-trade	2, 2	3,0
	Protectionism	3, 0	1,1

According to regime theory, mostly grounded in the neoliberal perspective, international regimes - “sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors’ expectations converge in a given area of international relations” (Krasner, 1982) - can lead to a cooperative equilibrium. If A knows for sure that it will be punished for defecting and if it can anticipate B’s actions, due to the enforcement and information sharing mechanisms of international organizations, A may decide to cooperate. The GATT/WTO trade regime “has rules and decision-making procedures that limit protectionism and increase transparency” (Cohn, 2015). These rules and procedures are likely to constrain actors from resorting to protectionism and trade weaponization.

The WTO’s authority is established through a rules-based international agreements/international organizations framework. By membership in the WTO, states agree to a set of governing principles and rules, to participate in an intergovernmental bargaining process, and to accept rulings, through various enforcement and appeals processes. The WTO’s dispute settlement mechanism in particular rules on cases when a member state believes another party is violating the terms of its agreement or commitment made within the WTO. Theoretically, the WTO framework rules “constrain the policies that governments can use to control the flow of goods, services, and technology into and out of their national economies” and “by accepting these constraints, governments shift international trade relations from the anarchic international environment... into a rules-based system in which governments have common rights and responsibilities” (Oatley, 2015). By authorizing retaliation against violation of its norms, the WTO makes defection more costly for its members, making cooperation possible.

In opposition to the regime theory, traditional realists “do not accept the idea that regimes have an important role in international political economy, because they believe that states are mainly concerned with survival, security, and power” (Cohn, 2015). From this perspective, the existence of international regimes would be seen as epiphenomenal, simply reflecting the interests of dominant countries. As summarized by Cohn (2015): “The most powerful states establish regime principles, norms, and rules that further their national interests, and they do not adhere to the principles, norms, and rules when they conflict with their interests”. In this sense, the GATT/WTO system simply reflects the interest of the United States, as the most powerful after World War II.

In a midground position, the neo-Realist version of the hegemonic stability theory (HST) concurs that international regimes can foster cooperation in some issue-areas, but only if it is backed by an hegemonic power. The HST posits that a hegemon fully maintaining its position will opt to foster a liberal trade regime to consolidate its power by offering its dominant economic size and market as “goods” for other states (Keohane 1997; Gilpin 1987). However, a hegemon critically challenged by a rising power would seek to curtail liberal trade due to geostrategic calculations. Applying the theories presented by Krasner (1976) and Gilpin (2001) to the case of the US, it seems the US as a gradually declining hegemon should have reverted to protectionism much earlier than it has been in the recent years. Various scholars have noted such features of international institutions and regimes as a key variable to achieving “trade peace” under the umbrella of interactive trade theory (Mayer 1981; Riezman 1982; Harrison and Rustrum 1991). Interactive trade theory posits that the economic or trade policy of a state has an inevitable effect on the policy options of the other states (Francois et al. 2019). Similar to Waltz’s (2010) argument that states are unequally interdependent, interactive trade theory also suggests that states must have a significant economic size to effectively influence and alter the prices of goods that they trade, and, accordingly, the collective economic welfare of its trading partner (Francois et al. 2019).

Therefore, the extent to which these rules effectively constrain states’ behaviors in practice is up for debate. Further, being based on a membership system, countries outside of the system will not face similar constraints. John Barton (2006) for one, argues that the “authoritative gap” from the regime’s national leaders in their willingness to actively participate in the process of trade liberalization “reflects the regime’s inability to recast its rules and norms of behavior in line with the changing interests and power of its members” and the evolving circumstances of international trade (Barton, 2006). Further, “the rules chosen in 1947 to open trade generated political challenges for the organization in the ensuing decades” (Barton, 2006). From the lengthy, time-consuming intergovernmental bargaining at and between each WTO ministerial meeting round and the growing complexity of the negotiation issues as well as the growing diversity of interests among WTO member governments, the WTO faces a number of challenges going forward. In light of such challenges, the increasing proliferation of trade weaponization poses an ever-greater risk to the current trade regime.

3.0 Analytical framework

Borrowing from the realist perspective, we assume that the cross-borders exchange of goods and services entails economic vulnerabilities. The employment of trade tools with the objective of pushing a country to change its behavior by exploiting these vulnerabilities is what we will be calling trade weaponization. In what follows, we will establish a framework to guide us through concrete cases of trade weaponization that have taken place in the past eighty years. Our approach is based on four analytical pillars: objectives, vulnerabilities, diplomatic/military relations between contenders, tools, and underlying institutional framework.

3.1 Assessing the objectives

As suggested by our literature review, the trade weaponization can be motivated by either economic goals or political concerns. We define economic goals broadly as the introduction of trade restrictions aiming ultimately to either increase the aggregate income of a country or simply to benefit some interest group by supporting an industry or group of industries. Typical examples of this type of conflict would include the Chicken War and the Boeing-Airbus cases. Politically motivated trade weaponization, on the other hand, seeks non-economic objectives, often related to security concerns but sometimes also with other objectives such as human rights. This kind of trade weaponization is exemplified by the first US-Japan case (1941) and the Oil Embargo (1973). In order to describe the objectives and classify them into these two categories, we will rely on historical analysis, using the best-available secondary sources on each of the historical episodes.

At this point, one clarification is relevant. The distinction between the economic and political trade weaponization is sometimes not trivial. As we saw in our literature review, the political power of a country is closely related to its economic strength. In this sense, it can be hard to tell whether a trade measure is seeking ultimately to maximize domestic welfare and promote sectoral interests, or to inflict economic harm to another nation in order to avoid an eventual economic or technological catch up that would shift the prevailing balance of power. For example, one can argue that the United States fought a “trade war” against Japan in the 1980s not to achieve any welfare gain but rather to slow down the technological catch up of Japan – arguably seen as a potential security threat in the long run. Given this potential difficulty, we will rely on more than one source of historical reconstruction for each case study, trying to present different interpretations when necessary.

The distinction between these two categories - economically vs. politically motivated - is important because, according to our theoretical perspective, the conflict tends to evolve in fundamentally different ways depending on the type of trade weaponization. When sovereign states pursue purely economic objectives, they will stick to the logic of either sectoral or aggregate economic gains. Under these circumstances, a liberal view on trade is more likely to be applicable, and international regimes tend to play an important role in the dispute settlement, avoiding the escalation of the conflict and the involvement of other issue-areas.

Things would tend to evolve differently when it comes to political trade weaponization. In those cases, the willingness of the aggressee to endure economic damage is higher, since, in line

with the Realist view, security concerns prevail to any other objective in the political calculus of sovereign states. Therefore, the “pain threshold” (Nephew, 2017) of the aggressor is higher: even when it loses more than the aggressor, it may still be willing to endure the economic harm. In the Oil Embargo (1973) case, for example, the Arabs tried to force the United States to choose between cheap oil and Israel, a key regional ally. Given that cutting off their military supplies to Israel could entail a victory of Egypt and Syria – supported by the Soviet Union – it made sense to endure economic pain for months in order to avoid a shift in the regional balance of power in favor of its main rival, especially in an area to which Western countries were heavily dependent for their energy supply. Clearly, the United States could have reduced its economic loss by staying out of the Yom Kippur war, but that would have a political price that was certainly higher in the view of American policy makers.

From our theoretical perspective, the results of economically motivated trade disputes are more predictable: the side that can inflict more economic damage to the other is more likely to win, the conflict tends to be shorter in duration, and the dispute tends to be contained to the issue of trade itself. When it comes to politically motivated trade weaponization, especially when security concerns are involved, countries can endure more economic harm, and so economic pressure may be less effective, and the evolution of the events can be unpredictable - sometimes even evolving to armed conflict as in the case of United-States Japan in 1941.

3.2 Assessing vulnerabilities

Drawing predominantly upon the Realist view of International Relations, we concur that interdependence, and more specifically asymmetric interdependence, generates vulnerabilities that can be politically exploited. An asymmetric interdependence relationship - which is what can determine the effectiveness of the trade weapon - is characterized by a situation in which country B will do anything - or almost anything - in order to maintain its trade with country A, whereas country A - albeit also incurring in welfare losses - can stand relatively well (Hirschman, 1980). In general, a country A would only weaponize B if B is economically vulnerable. However, that is not all that matters for the outcome of a trade conflict. A country can be vulnerable and still endure economic damage if the stakes are high.

3.2.1 Comparative Size and Economic Development

As suggested by Krasner (1976), vulnerabilities are strongly correlated with the size and economic development of countries. Since a large rich country (A) can do relatively well without trade, and a poor small country (B) desperately needs to trade with A to for the sake of its domestic stability, country B will do whatever country A asks it to do to keep their trade relations. In this case, country A would almost always win trade wars against B – except in the case of demands that would threaten the existence of B as a sovereign state. From this perspective, we will be compiling data on **GDP**, **per capita GDP**, and **population size** as variables that can give us some clues about relative vulnerabilities.

3.2.2 Bilateral Trade Data

Clearly, though, that would not be enough information to assess an interdependence relationship. Indeed, “a country menaced with an interruption of trade with a given country has the alternative of diverting its trade to a third country; by so doing it evades more or less completely the damaging consequences of the stoppage of its trade with one particular country” (Hirschman, 1980). As such, if there is another large rich country, C, and/or a myriad of other small poor countries D, E, and F, willing to exchange goods and services with B, the influence of A is muted. Therefore, in order to assess the vulnerability of B, we need to incorporate into our analysis variables that indicate the benefit it gets from trading with A and the difficulty it would face to divert exports and imports from A to C, D, E, and F.

A reasonable way to assess the benefit that B gets from trade, albeit simplistic (in the sense that it does not incorporate gains such as efficiency enhancements, reduction in price of tradable goods, and product diversification), is to take the amount of its **gross exports to country A over its GDP**. If country B’s exports to A are high as a share of its aggregate income, B will find “greater difficulties of diversion and thereby find itself in an inferior bargaining position” (Hirschman, 1980). In this sense, a **export over GDP** is an indicator of vulnerability because it is associated with both the benefit that a country gets from trade and the difficulty of adjustment.

Another variable that can help us to measure the potential length and painfulness of adjustment that country B would face to substitute A as a market or supply source depends “not only on the absolute amount of A’s trade with B, but also on the importance of its trade relatively to B’s total trade” (Hirschman, 1980). Indeed, a large rich country A can have its ascendancy over B mitigated if the latter trades with a myriad of countries. In this sense, the higher the ratio of the volume flow (exports + imports) between A and B to the total trade volume (exports + imports) of B, the more vulnerable B is to A.

A more specific indicator of vulnerability, referring to export restrictions only, is the total exports of country A of a good x over the total supply of x. This indicator is useful to assess the vulnerability of B to the threat of A to restrict its exports of x, as it effectively happened in the case of the 1973 Oil Crisis, for example. Interestingly, we find that A can weaponize trade if it has a dominant position in the supply of certain goods, even if it is small and poor relative to B. When it comes to import restrictions, though, only the large rich country is also the one who weaponizes trade in the first place.

3.2.3 Domestic interest groups that benefit from trade with A are politically strong

As we discussed in the literature review, trade has relevant distributive impacts across different domestic groups. This is to say that a trade relationship between A and B will benefit some social sectors – usually those who sell goods and services to B. If A decides to suspend trade with B, those social sectors will side with A and try to convince their own government to accept the demands of A. If this “commercial fifth-column” (Hirschman, 1980) is politically strong, country B is more likely to capitulate, even when geostrategic national goals are at stake. Indeed, “in its pursuit of the national interest, the state may also have overcome resistance from domestic groups” (Krasner, 1979). The degree of influence of fifth columns in economic policy decisions is

related to the strength of the state, as defined by Katzenstein (1978). If decision-making in B is fragmented and influenced by different sectoral voices, B is a weak state, and so it is more vulnerable to A's pressures. In this sense, democratic regimes – being more open – have a disadvantage in trade wars in terms of vulnerability. Therefore, we will also consider whether a country is a democracy or not in the case studies.

3.3 Within alliance vs. across alliance

As introduced in the literature review, Gowa & Mansfield (1993) argued that free trade is more likely within, rather than across, political-military alliances, given positive (negative) externalities of trading with an ally (foe). It is possible to use a similar reasoning to understand the effects of trade restrictions. When A imposes trade restrictions against B, it inflicts economic harm to B (and to itself, unless the restrictions influence the terms of trade). If B is within the same alliance as A, the economic harm to B is a negative externality for security purposes. Conversely, if country A and B do not have any military partnership, the opposite is true: doing harm to B is a positive externality. In the first case, a “trade war” will only take place if the potential economic gains are very high. Moreover, the risk of massive escalation is mitigated by the fact the both countries are unwilling to do too much harm to the other. Therefore, the parties are likely to agree upon an institutional solution, with the arbitration of multilateral organizations. The opposite is true when it comes to across-alliance disputes.

3.4 International regimes

For the scope of this paper, we will adopt a position that is closer to the Realist formulation of the HST, positing that the multilateral trade regime does play a role in fostering cooperation - limiting the escalation of trade disputes by providing an institutional arena for their settlement - but that it is also contingent to the structural variables in the international system. As previously discussed, Krasner (1976) suggests that the international system can be more or less conducive to the existence of an open trade system depending on the distribution of power resources. With a *hegemon* and several smaller states - as in the Western block following World War II - free trade was in the interest of the dominant power, so openness tended to prevail over autarky.

In our view, strong international regimes can lead to a faster settlement of conflicts and avoid escalation. However, their effectiveness depends on the willingness of countries to accept their rulings - since, in the limit, the WTO do not have means of coercion other than the authorization of trade retaliation. In this sense, when a trade dispute is related to political objectives of high geostrategic importance, the existence of international regimes may be of little dissuasive power, since countries will be willing to endure economic retaliation and even the reputational cost of going against internationally-agreed rules. Therefore, our hypothesis is that international regimes tend to have an influence in the outcome especially if the conflict is centered on purely economic objectives and the countries involved are in the same military alliance.

Analytic framework		
Overview: We approach historical episodes of trade weaponization across four analytical pillars: classification of objectives, economic vulnerabilities, diplomatic ties, and institutional mediation		
Axis of analysis	Details of analysis	Why this matters
Objectives of trade weaponization (i.e. employment of trade restrictions to force a change in the behavior of another country) can be classified as:	<p>Economic: aggregate or sectoral economic goals (e.g. reaction against infant industry protection or optimal tariff policy)</p> <p>Geopolitical: broad range of non-economic goal (e.g. diplomatic disputes, concerns about economic and technological catch up)</p>	Narrow economic disputes tend to be solved in institutional arenas as countries seek to avoid economic painful escalation; in geopolitical disputes, the pain threshold is higher, and so there is more risk of escalation (sometimes to other issue-areas)
Relative vulnerability of the parties (i.e. Country B is vulnerable if it displays a willingness to withstand high degrees of pain to maintain its trade with country A)	<p>Sources of vulnerability:</p> <p>Relative size (population)/economic development (GDP and per capita GDP): if B is a small poor country, its relies more on trade, so it is more vulnerable to the large rich country A</p> <p>Economic dependency: if gross exports A as a share of the GDP is high, B is vulnerable</p> <p>Substitutability: If trade flow with A is high relative to the trade flow with the rest of the world, it is harder for B to divert trade to third-countries, so it is more vulnerable</p> <p>Market power (for export restrictions): share of total exports of good x by country A as a share of the global supply of x</p> <p>Political regime: if a country has an open political system where sectoral interests have strong political influence, domestic interests affected by trade weaponization can act as “commercial fifth-columns”</p>	The more vulnerable country B is, the more likely it is to give up to economic pressures by country A - although the pain threshold can vary if geopolitical concerns are involved.
Diplomatic relations	Security externalities: Since economic strength and economic power are correlated, if a country imposes welfare-destructive trade restrictions against an ally it will harm its own security coalition.	Countries are more likely to avoid an escalation in trade conflicts against an ally, and so institutional solutions tend to be more common
International institutions (GATT/WTO/others)	In the presence of strong multilateral regimes, conflicts are less likely to take place, and if they do, they are less likely to escalate. The institutional framework’s governing rules and procedures make defection more costly for its members, enhancing cooperation and constraining actors from resorting to protectionism and trade weaponization.	Politically motivated and across-alliance conflicts are more likely to take place outside the scope of regimes. On the other hand, relatively low-stakes economic conflicts with fewer or no geostrategic repercussions are more likely to reach a negotiated agreement within the institutional framework.
Working hypothesis: If B is vulnerable to A, it will be more likely to accept the demands of A. If objectives of A are non-strictly-economic the conflict triggered by trade weaponization is more likely to escalate and to involve other issue-areas. Institutions can play a dissuasive role - but less likely so in the case of politically-motivated across-alliances conflict.		

4.0 Historical case studies and analysis

4.1 Introduction

This report strives to understand how and why trade weaponization emerges, develops and ultimately concludes. These insights can accordingly inform one's hypotheses regarding the outcome and development of current and future trade conflicts, while simultaneously providing an analytic framework with which to assess and understand trade weaponization. This report analyzes a collection of trade conflicts from 1940 until today, to understand recent developments in international trade and assess whether the theoretical explanations of such conflicts are salient. As laid out in our Analytic Framework, trade conflicts are analyzed along four key axes: (1) the objectives of the parties (geopolitical vs. economic), (2) the parties' relative vulnerability, (3) diplomatic relations, and (4) whether international institutions such as the WTO were involved in solving the conflict.

These four analytical axes inform our understanding of the three key predictors of a trade conflict's outcome, as described in the Theoretical Framework: (1) vulnerability to trade restrictions, (2) willingness to endure economic pain and (3) the possibility of solving a trade conflict over strong and potentially even institutional diplomatic/institutional channels.

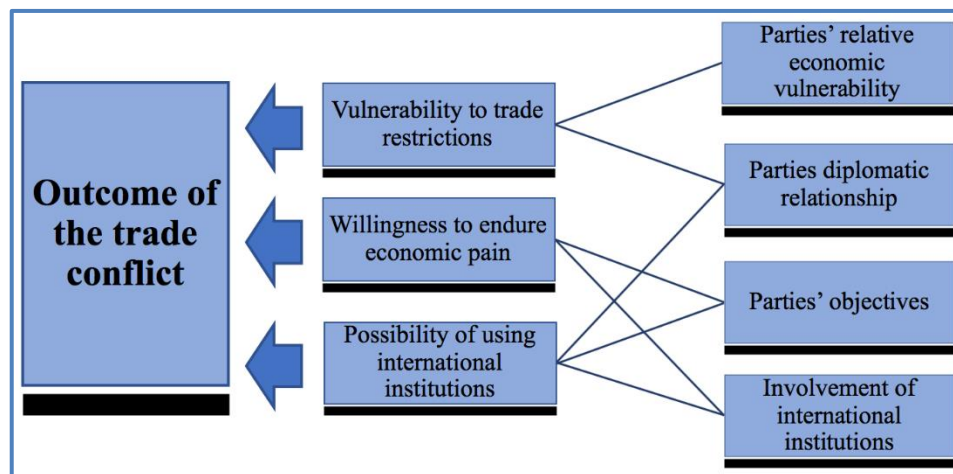


Figure 1: Levels of analysis

The subsequently analyzed cases of trade conflicts were chosen to provide a holistic overview regarding objectives, actors, tools and institutional involvement (see figure 2). The selected cases also reflect key historic developments in international trade, as described in the next paragraph. For each key period, cases are assessed.

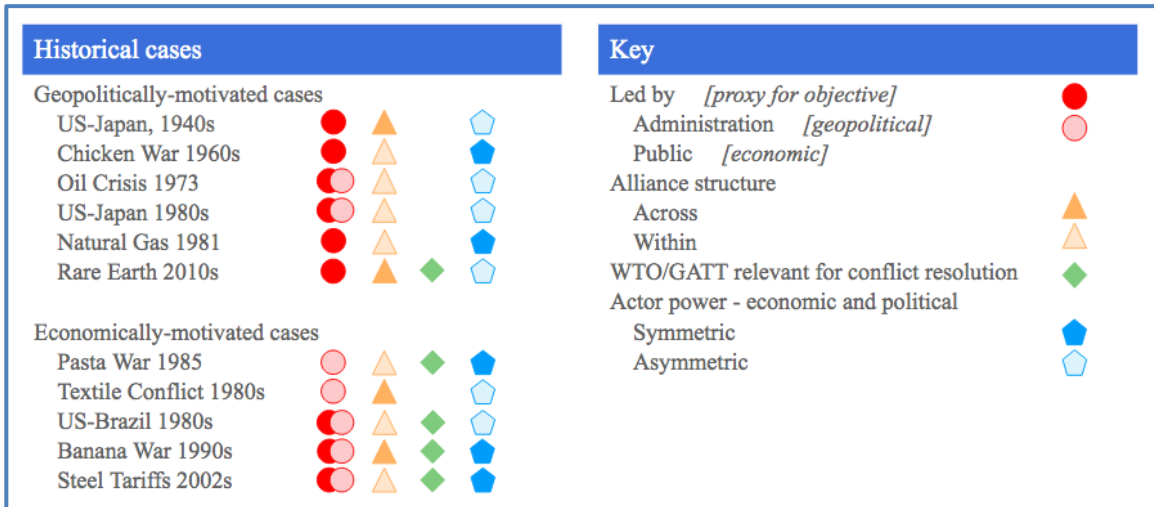


Figure 2: Selected case studies provide insight across a variety of trade weaponization structures.

Several broad shifts in states' propensity towards trade weaponization have emerged over the past few decades. In the decade before WWII countries mainly engaged in trade with countries they were politically close to those within their political (and colonial) sphere of influence (see *Japan-US case, 1941*). After the war, however, the US and its allies installed an international trade regime under GATT to open up trade between a larger bloc of countries, constituting the "Western world." Subsequently, as trade dependencies with third countries were small, trade disputes with narrow economic goals were more prevalent (see *EEC-US cases, 1960s and 1980s*). In the 1970s, international trade grew and countries in Latin America and Asia began to industrialize. The US and others increasingly weaponized trade (compare for example *US-Brazil, 1985*, as well as *US-China, 1980s* and *US-Japan, 1980s*), until the establishment of the WTO and the inclusion of all major global economic powers. Trade weaponization from the 1990s on was accordingly limited (compare *EU-US Steel Tariffs, 1990s*, as well as *China-Japan, 2010*).

A first glance at the underlying vulnerabilities of the conflict partners already reveals insights into the complex correlation between political relations between nations, the propensity to apply trade weaponization against allies vs non-allies, and the relevance of specific resources. In Figures 3-5, one can perceive that within alliances, States will also weaponize trade if their economic power is not completely superior to their opponent, whereas across alliances, one perceives only clearly

I. Trade War - Strategic Resources				
Event	Indicators	Initiator	Recipient	*
US-JPN Oil Embargo (1939)		US	Japan	
	Net Exports / GDP	8.6%	12.8%	(0.042)
	Bilat Trade Volume / Total Trade Volume	7.9%	27.5%	(0.196)
	Bilat GDP Ratio	85.1%	14.9%	0.702
	Bilat GDP per Capita Ratio	93.0%	7.0%	0.860
	Initiator Market Share (Petroleum)	56.0%		
Alliance	N			
OPEC-US Oil Crisis (1973)		OPEC	US	
	Net Exports / GDP	12.7%	(0.3%)	0.130
	Bilat Trade Volume / Total Trade Volume	13.0%	3.8%	0.092
	Bilat GDP Ratio	5.6%	94.4%	(0.688)
	Bilat GDP per Capita Ratio	7.1%	92.9%	(0.658)
	Initiator Market Share (Petroleum)	0.452		
Alliance	N			
CHN-JPN Rare Earth (2009)		China	Japan	
	Net Exports / GDP	9.2%	2.8%	0.054
	Bilat Trade Volume / Total Trade Volume	10.1%	15.5%	(0.054)
	Bilat GDP Ratio	47.7%	52.3%	(0.048)
	Bilat GDP per Capita Ratio	91.2%	8.8%	0.624
	Initiator Market Share (Rare Earth)	84.0%		
Alliance	N			

Figure 3: Vulnerabilities with resource dependency (green = less dependent)

dominating States to weaponize trade. Dependencies on strategic resources grant States further power to weaponize trade against stronger opponents.

II. Trade War - Within Alliance

Event	Indicators	Initiator	Recipient	Δ
EEC-US Chicken War (1962)		EEC	US	
	Net Exports / GDP	(4.5%)	8.7%	(0.132)
	Bilat Trade Volume / Total Trade Volume	15.0%	11.3%	0.037
	Bilat GDP Ratio	32.4%	67.6%	(0.352)
	Bilat GDP per Capita Ratio	18.6%	81.2%	(0.624)
	Alliance	Y		
US-JPN (1980)		US	Japan	
	Net Exports / GDP	(0.9%)	(0.5%)	(0.004)
	Bilat Trade Volume / Total Trade Volume	9.4%	18.7%	(0.093)
	Bilat GDP Ratio	71.3%	28.7%	0.426
	Bilat GDP per Capita Ratio	56.1%	43.9%	0.122
	Alliance	Y		
US-EU Pasta (1984)		US	EU	
	Net Exports / GDP	(1.4%)	(2.6%)	(0.012)
	Bilat Trade Volume / Total Trade Volume	13.9%	12.6%	(0.017)
	Bilat GDP Ratio	53.0%	47.0%	0.006
	Bilat GDP per Capita Ratio	66.5%	33.5%	0.330
	Alliance	Y		
US-EU Steel (2002)		US	EU	
	Net Exports / GDP	(3.5%)	0.6%	(0.012)
	Bilat Trade Volume / Total Trade Volume	16.1%	9.1%	(0.017)
	Bilat GDP Ratio	54.0%	46.0%	0.080
	Bilat GDP per Capita Ratio	63.9%	36.1%	0.278
	Alliance	Y		

Figure 4: Vulnerabilities within alliances (green = less dependent)

III. Trade War - Across Alliance

Event	Indicators	Initiator	Recipient	Δ
US-CHN Textile War (1979)		US	China	
	Net Exports / GDP	(1.2%)	(0.5%)	(0.007)
	Bilat Trade Volume / Total Trade Volume	0.2%	5.3%	(0.051)
	Bilat GDP Ratio	94.0%	6.0%	0.934
	Bilat GDP per Capita Ratio	96.6%	1.4%	0.972
	Alliance	N		
US-BRA (1985)		US	Brazil	
	Net Exports / GDP	(2.5%)	5.6%	(0.081)
	Bilat Trade Volume / Total Trade Volume	1.5%	24.3%	(0.228)
	Bilat GDP Ratio	95.1%	4.9%	0.902
	Bilat GDP per Capita Ratio	91.6%	8.4%	0.832
	Alliance	N		
US-CHN (2017)		US	CHN	
	Net Exports / GDP	(2.9%)	3.5%	(0.012)
	Bilat Trade Volume / Total Trade Volume	13.0%	14.2%	(0.017)
	Bilat GDP Ratio	61.6%	38.4%	0.232
	Bilat GDP per Capita Ratio	87.2%	12.8%	0.744
	Alliance	N		
JPN-ROK History (2019)		Japan	ROK	
	Net Exports / GDP	3.5%	4.7%	(0.012)
	Bilat Trade Volume / Total Trade Volume	4.6%	6.3%	(0.017)
	Bilat GDP Ratio	75.4%	24.6%	0.508
	Bilat GDP per Capita Ratio	55.6%	44.4%	0.112
	Alliance	Y		

Figure 5: Vulnerabilities across alliances (green = less dependent)

As noted above, differentiating between purely economic and purely geopolitical motives of countries engaging in trade conflicts is not always straightforward. This report nevertheless identifies seven cases with mainly geopolitical and strategic reasons for the outbreak of the conflict, as well as five cases with a clear focus on narrow economic objectives. Since understanding their development requires less historic background knowledge of these cases, they will be presented in a more condensed form than the cases of geopolitical trade weaponization.

Moreover, as explained above, our definition of trade weaponization encompasses a narrow definition of trade tools as measures directly aiming to restrict imports and exports. Those include tariff and non-tariff barriers, such as quantitative restrictions (bans and quotas) and technical requirements. For the sake of clarity and simplicity, we opted for not including indirect trade tools, such as currency manipulation and FDI restrictions. This section will proceed as follows: First, the geopolitically-motivated cases of trade weaponization will be presented, each highlighting the specific reasons for outbreak, development and outcome of the conflict. Second, the mainly economically-motivated cases will be assessed, each in turn explaining the same facets. Finally,

all cases will be summarized and their findings compared to the theoretical findings presented earlier in this report.

4.2 Geopolitically-motivated case studies

US-Japan 1940s

Summary

In the 1850s, visits by Commodore Matthew Perry's American warships opened Japan to international trade. And by the 1920s and 1930s, Japan was on its way to becoming a major industrial power. After World War I, Japan replaced Britain as the largest producer of yarn, and the country's trade balance began moving into surplus. However, Japan lacked many natural resources such as oil, rubber, copper, and more. Japanese political leaders accordingly relied on territorial expansion to other countries in East Asia, like Korea and China, from which to acquire natural resources and expand its market for selling manufactured products, emulating the Western imperialist model. By the 1930s, Japan was exporting textiles, oil, canned fish, tea, and pottery to the United States, and importing cotton, oil, wheat, and scrap metal.

Simultaneously, Japan was building its power as a military-industrial complex. Japan's naval and army strength allowed it to project its power into East Asia and the Pacific (namely Korea and northern China). Beginning with Japan's invasion of Manchuria in 1931, leading into the 1937 Sino-Japanese War, and Japan's 1940 invasion of French Indochina, the country's increasingly expansionist goals gave America cause for concern.

Meanwhile, in the US, Franklin D. Roosevelt had been elected president in 1933. As the US became further involved in matters of European diplomacy, the Roosevelt administration worked with the British and the French to oppose German expansion leading into, and throughout, World War II. Japan's expansionist plans were in direct conflict with American interests in Asia, particularly China. Washington favored an Open Door Policy toward China. It wanted to keep China's natural resources and markets free from control by Japan or any other nation. Another reason the US was critical of Japan's imperialist expansion was Japan's "Greater East Asia Co-Prosperty Sphere" project. Japan wanted to use this project to build its own economic and military bloc in Asia against the US and all other Western countries. To curb Japan's strength and obstruct its strategic goals, Secretary of War Henry L. Stimson strongly advocated the use of economic sanctions; Treasury Secretary Henry Morgenthau and Interior Secretary Harold Ickes further endorsed this policy. As a result, the Roosevelt administration began imposing a series of increasingly stringent economic pressures on Japan to obstruct its expansionist goals in Asia.

Beginning in 1939, the US broke off treaties with Japan, imposed export restrictions, and froze Japanese assets in the US. Trade relations between the two parties were effectively severed, and tensions multiplied. Said tensions came to a head on December 7, 1941 when Japan attacked Pearl Harbor and both countries became part of a world war, fighting on opposing sides. The Japanese decision to attack Pearl Harbor involved a complex web of geostrategic and economic goals, though one key objective was to attack the US Pacific Fleet in order to prevent them from interfering with Japanese expansion into the Dutch East Indies and Malaysia. Japan's decision to

move into Southeast Asia was exacerbated by its need for resources in the face of the economic strain caused by US trade weaponization.

Actors

The US-Japan bilateral relationship had been deteriorating since the breakdown of the Four-Power Treaty, signed between the US, Britain, France, and Japan during the 1921 Washington Naval Conference to reinforce disarmament. The Treaty maintained that each party would uphold the status quo in the Pacific region by respecting each country's territories and not seeking further territorial expansion. However, the Treaty contained "no commitment to armed force, no alliance, no written or moral obligation to join in defense" (Kissinger 373).

In 1931, when Japanese forces occupied Manchuria, legally a part of China, and turned it into a satellite state, European countries had no mechanism for enforcing even the economic sanctions briefly contemplated by the League of Nations (article 16). In fact, "no country was prepared to fight a war against Japan (or was in a position to do so without American participation)" and "even if the machinery for economic sanctions had existed, no country was willing to curtail trade with Japan in the midst of the Depression" (Kissinger 286). Meanwhile, the US "introduced a sanction of its own – the policy of refusing to recognize territorial changes brought about by force – which at the time seemed like an evasion but which a decade later, in Roosevelt's hands, *turn[ed] into a weapon* for forcing a showdown with Japan." (Kissinger 377, emphasis added). Originated by Stimson in 1932, the sanction was invoked by Roosevelt in the fall of 1941 to demand that Japan withdraw from Manchuria and all of its other colonized territories. In response to Japan's occupation of Indochina in July 1941, Roosevelt "abrogated the US commercial treaty with Japan, forbade the sale of scrap metal to Japan, and encouraged the Dutch government-in-exile to stop oil exports to Japan from the Dutch East Indies (present-day Indonesia)" (Kissinger 392).

The US, which acted as the aggressor country in this case, had more economic leverage over Japan in terms of its ability to impose pressure by weaponizing trade. Stated otherwise, the economic interdependence between the two countries generated vulnerabilities to Japan that the United States could politically exploit. In 1937 and 1938, the US share in world exports to Japan for commodities essential to the war effort totaled 54% and 56% respectively. Following the outbreak of World War II, and Japan's signing of the Tripartite Pact with Fascist Italy and Nazi Germany, Japan's need for American goods increased, since it could no longer rely on imports from the belligerent countries. In 1938, Japan's imports from Europe totaled 376 million yen; almost half of these imports were from Germany, while 17% were from Britain. With these imports cut off due to the war, Japan needed to rely more on the US in order to sustain its level of production needed to continue the war effort thereby increasing the relative importance of the US exports to Japan. Furthermore, the nature of US exports to Japan were heavily centered towards goods like petroleum and petroleum products, machinery, scrap iron, copper, aircraft, and automobiles. In fact, in 1938, the US supplied 67% of Japan's total imports of metal-working machinery.

Meanwhile, the principal Japanese exports to the US were superfluous luxury goods like raw silk, types of seafood, china and porcelain, and flowers. In addition, the US maintained a trade surplus with Japan; in 1938 for example, US exports to Japan totaled \$239 million, while Japanese exports to the US amounted to \$128 million. Further, the relatively lower degree of substitutability of goods Japan was relying on from the US further increased Japan's vulnerability. Much of the metal, oil, and other materials Japan was using for its war effort in China came from US imports, and when the British and Dutch followed suit by embargoing exports to Japan from their colonies in Southeast Asia, this further reduced substitutability of these exports to Japan. The analysis of their bilateral trade relations indicate that Japan had much more to lose from the imposition of trade restrictions. Therefore, according to our definitions, it was vulnerable to economic pressures by the United States.

**TABLE 1—UNITED STATES SHARE IN WORLD EXPORTS TO JAPAN,
ESSENTIAL FOR WAR PURPOSES
(Value in U. S. Dollars)**

Commodity	1937				1938			
	World Exports		U. S. Share		World Exports		U. S. Share	
	Value	Per cent	Value	Per cent	Value	Per cent	Value	Per cent
<i>Total</i>	317,209,688	100.00	173,009,621	54.54	306,393,950	100.00	171,574,167	56.00
Petroleum and Products ^a	71,598,824	22.57	44,900,486	62.71	81,034,885	26.45	53,135,672	65.57
Metal-working machinery ^a	17,578,766	5.54	12,223,524	69.53	36,448,527	11.90	24,454,707	67.09
Scrap or old iron and steel	44,752,546	14.11	39,385,832	88.01	24,407,089	7.97	22,061,212	90.39
Copper	20,184,773	6.36	19,212,434	95.18	24,385,546	7.96	22,163,778	90.89
Aircraft and parts ^b	3,538,757	1.11	2,483,946	70.19	22,692,655	7.41	17,454,477	76.92
Other iron and steel semimanufactures	49,218,217	15.52	32,676,320	66.39	20,973,343	6.84	11,251,804	53.65
Automobiles, parts, and accessories ^a	16,456,036	5.19	15,206,231	92.41	18,635,299	6.08	12,050,536	64.67
Rubber	28,678,611	9.04	171,362	0.60	14,864,069	4.85	249,792	1.68
Aluminum	4,808,810	1.52	280,061	5.82	13,095,231	4.27	476,345	3.63
Hides and skins	12,832,580	4.04	2,690,983	20.97	7,916,835	2.58	2,652,482	33.50
Nickel	5,740,697	1.81	218,638	3.81	6,624,440	2.16	157,317	2.38
Lead	7,708,198	2.43	754,358	9.79	4,613,888	1.51	2,100,054	45.52
Ferrous alloys	1,717,712	0.54	1,366,062	79.53	2,819,420	0.92	2,331,979	82.71
Zinc	4,967,672	1.57	53,997	1.09	2,794,622	0.91	26,768	0.96
Internal combustion engines ^a	1,139,630	0.36	538,555	47.26	1,658,875	0.54	542,637	32.71
Arms and ammunition	2,626,918	0.83	49,038	1.87	696,186	0.23	100,365	14.42
Leather	2,562,460	0.81	702,942	27.43	528,369	0.17	44,676	8.46
Metals and alloys, not elsewhere specified	158,406	0.05	94,852	59.88	321,711	0.10	319,566	99.33
All others ^c	20,940,075	6.60	None	None	21,882,960	7.15	None	None

^a Including shipments to Manchuria; excluding kerosene.
^b Including shipments to Manchuria; U. S. A. figure for 1938 includes shipments to Shanghai.
^c Including ores, tin, antimony, mercury, mica, and asbestos.

Figure 6: American trade and Japanese aggression statistics (Bisson).

	January to November					
	1937		1938		1939	
	Value	Per cent	Value	Per cent	Value	Per cent
<i>Total</i>	271,948	100.0	211,093	100.0	203,719	100.0
War materials	157,041	57.8	142,235	67.4	142,230	69.8
Raw cotton	59,876	22.0	47,179	22.3	35,852	17.6
Others	55,031	20.2	21,679	10.3	25,637	12.6

Figure 7: American trade and Japanese aggression statistics (Bisson)

Year	U. S. Exports to Japan	U. S. Imports from Japan	Gold Purchases by U. S.	Silver Purchases by U. S.
1937	288,558	204,201	246,470	1,273
1938	239,575	126,820	168,740	2,929
1939	231,405	161,196	165,606	4,234
Totals	759,538	492,217	580,816	8,436

Figure 8: American trade and Japanese aggression statistics (Bisson)

Objectives

The US decision to terminate its 1911 Treaty of Commerce and Navigation with Japan in July 1939 had the geostrategic and foreign policy aims of protecting Western interests in China, supporting British efforts following the 1939 Tientsin incident, and indicating disapproval for Japan's increasingly expansionist territorial policies and violation of the Nine-Power Treaty. The decision also had strong backing and approval in Congress, even including congressmen who had more Isolationist stances on the US role in world politics. In July 1940, the US signed the Export Control Act, which effectively imposed a trade embargo on war materials to Japan. It was again motivated by the desire to increase pressure on Japan and to obstruct its expansionist goals in Asia. After war broke out in Europe and Japan signed the Tripartite Pact with Nazi Germany and Fascist Italy in September 1940, to continue pressurizing Japan and to support the Allies' war effort in Europe, the US made the decision to freeze Japanese assets in the US and embargoed the export of oil and gas that was still in commercial flow to Japan, effectively bringing all commercial relations between the two countries to an end. The British and Dutch, allied with the US, soon followed suit, embargoing exports to Japan from their colonies in Southeast Asia. Though the US acknowledged that "measures short of force in a world at war look rather puny...it is well to remember that very great changes have occurred in the world [and] Japan's need for American goods has certainly been increased" (W.H.M., 1940). Thus, it shows an early indication of US

understanding that it could use Japan's trade dependence and vulnerabilities to impose economic harm for a geostrategic goal, i.e. trade weaponization. The US is the aggressor in this conflict, deliberately choosing to weaponize trade, knowing it has the upper hand in trade dependency.

Beginning in July 1937, Japan was embroiled in a series of military conflicts with China today jointly considered the Second Sino-Japanese War. Japan was striving for broader territorial expansion in the region, largely driven by its need for natural resources, as well as its desire to establish a new order in East Asia, under the "Greater East Asia Co-Prosperty Sphere" project. Japan wanted to use this project to build its own economic and military bloc in Asia against the West. Japan's invasion of French Indochina was driven by its desire to prevent China from importing war supplies, like arms and fuel, from the US through French Indochina. Under increasing strain from sanctions imposed by the US and its allies, Japan faced an existential threat. According to an intercepted cable sent to Admiral Nomura, the Japanese Ambassador in Washington, Japan must in order "to save its very life, must take measures to secure the raw materials of the South Seas. It must take immediate steps to break asunder this ever-strengthening chain of encirclement which is being woven under the guidance of and with the participation of England and the United States" (US Department of State, 1941).

Tools

On July 26, 1939, the US terminated its 1911 Treaty of Commerce and Navigation with Japan (effective: January 25, 1940). The treaty had provided most-favored-nation (MFN) treatment between the signatories, and established the legal basis for commerce, navigation, property rights, residence, travel, protection of laws, and access to courts of the nations of each country in the territories of the other. Much of the metal, oil, and other materials Japan was using for its war effort in China came from US imports, and the treaty's termination placed Japan in a difficult position.

On July 2, 1940, President Roosevelt signed the Export Control Act, authorizing him to license or prohibit the export of essential defense materials. Under this act, on July 31, the US restricted exports of aviation motor fuels, lubricants, No. 1 heavy melting iron, and steel scrap. In a move aimed specifically at Japan, Roosevelt imposed an embargo (effective: October 16, 1940) on "all exports of scrap iron and steel to destinations other than Britain and the nations of the western hemisphere." Later in that year, on December 17, President Roosevelt proposed a new Lend-Lease initiative. The US would provide Great Britain with the supplies it needed to fight Germany, but not ask for immediate payment. Instead, the US would "lend" the supplies to the British, deferring payment.

In July 1941, the US froze Japanese assets in the US and embargoed the export of oil that was still in commercial flow to Japan, effectively bringing all commercial relations between the two countries to an end. The British and Dutch, allied with the US, soon followed suit, embargoing exports to Japan from their colonies in Southeast Asia.

Negotiations between the US and Japan continued through 1941, but tensions remained high. Japanese Foreign Minister Teijiro Toyoda communicated to Ambassador Kichisaburo Nomura on July 31, 1941 that “commercial and economic relations between Japan and third countries, led by England and the United States, are gradually becoming so horribly strained that we cannot endure it much longer. Consequently, our Empire, to save its very life, must take measures to secure the raw materials of the South Seas.”

US military officials captured secret messages from Japan, and learned Japan was planning an attack on the US unless there was a change in US trade policy. Back in Washington, officials expected the attack to occur south of Japan. Instead, Japan had planned a surprise attack on America’s main Pacific military base at Pearl Harbor. The trade conflict effectively “ended” with the outbreak of war, following Japan’s surprise attack on Pearl Harbor on December 7, 1941.

International institutions

From World War I to World War II, international trade between countries rested largely on a framework of preferential trading blocs and agreements, namely the most-favored nation (MFN) principle established through the 1860 Cobden-Chevalier Treaty. Extant literature has focused on the proliferation of inter-war trading blocs, as well intra-bloc trade shifts aligning with the political interests of countries along their alliance structures. This period is marked by the absence of an overarching international trade regime, which was later established in the post-World War II era through the GATT/WTO framework.

Key takeaways

The conflict initially began with an aggressor country (US) employing a series of increasingly stringent trade restrictions (tools used: export controls, trade embargo) motivated primarily by political, rather than economic, considerations. The US advocated the use of trade tools, via economic sanctions, to obstruct Japan’s expansionist goals in Asia. The conflict “ended” with the outbreak of war, with Japan’s attack on the US Pacific military base at Pearl Harbor on December 7, 1941.

In the absence of international trade regime, the alliance between two nations is fragile. It may easily break down when one party’s interests were harmed by the other. This was also the case for the Neutrality Pact signed by Japan and Soviet Union in 1941 while in 1945 Soviet Union denounced the pact and entered the war against Japan. Further, the US had more leverage over Japan in terms of trade, whereas Japan was more economically vulnerable. Much of the metal, oil, and other materials Japan was using for its war effort in China came from US imports, and when the British and Dutch followed suit by embargoing exports to Japan from their colonies in Southeast Asia, this further reduced substitutability of these exports to Japan. This case provides an example of geopolitically motivated trade weaponization across alliances in the absence of a clearly delineated international institutional framework. It also is a case in which the escalation of trade tensions culminated in the outbreak of military warfare. Indeed, our theoretical framework suggests that conflicts with these characteristics - geopolitical motivation and across-alliances -

are more likely to escalate and to spill-over other dimensions of bilateral relations. Also, in spite of Japan being relatively more vulnerable, the United States did not manage to constrain its expansionism by weaponizing trade. A potential explanation for that - suggested in our theoretical framework - is that the pain threshold of Japan was higher because the demands of the United States were essentially political. Since Japan saw its expansion in East Asia as essential to reduce its vulnerability to imported sources of strategic goods and, hence, as a security-related issue, it would hardly change its course of action because of economic pressure. In fact, if the trade expectations argument is correct, the sanctions made it even more urgent for Japan to overcome its vulnerability, which may actually have accelerated the evolution of bilateral conflict towards full-blown war.

Chicken War 1960s

Summary

In 1957, the “Common Market” (France, West Germany, Italy, Belgium, Netherland, and Luxembourg) founded the European Economic Community (EEC) to eliminate trade barriers and implement common policies regarding transportation, agriculture, and economic relations with nonmember countries. During the 1950s, European countries were still recovering from the aftermath of World War II, while in the United States, rapid post-war development of new industrial farming methods led to a huge increase in agricultural productivity. The US thus became the largest agricultural-product exporter to Europe at the end of the 1950s (Walker 1964, 678). The EEC prioritized integrating European member countries alongside promoting internal stability and prosperity. In order to achieve these goals, EEC countries began employing common policies and escalating trade barriers against other countries under cover of unifying the Union’s external tariffs. One such measure was implementing tariffs on agricultural imports.

The EEC’s protectionism had detrimental effects on countries in and beyond Europe, including its ally, the US, who supported the EEC’s integration. After several rounds of failed negotiation, even requested by GATT, the EEC refused to lift its trade barrier on agriculture. The trade conflict broke out in 1962 when EEC raised tariffs on poultry imports from the US. The US, in turn, threatened retaliatory tariffs of \$46M. The US leveraged its retaliatory tariff to push EEC to the negotiating table, but diplomacy failed. In the end, the US submitted to GATT arbitration and its total calculated loss due to tariffs was \$26M. The US accepted GATT’s offer in 1964 and announced an increased tariff on trucks, brandy, dextrin, and potato starch, amounting to \$26M. An armistice was reached.

Actors

In 1949, the US and European countries, including the six countries which founded EEC later, co-founded the North Atlantic Treaty Organization (NATO) and signed the North Atlantic Treaty. NATO was the start of the US pursuing multilateralism in Europe and helped to shape the postwar political development and economic recovery under the US umbrella (Cha 2009, 158-161). Therefore, from the beginning, the United States supported the integration of the EEC, and

a legal framework of Euro–American trade links were established under the General Agreement on Tariffs and Trade (GATT). The EEC quickly became the world’s second-largest economic entity after the United States. In 1962, US President John F. Kennedy proposed an Atlantic partnership between Europe and the United States (Digital Research in European Studies). The main purpose of the US’s “Atlantic framework” was to ensure that a united Europe is friendly to the US (Lundestad 2003, 78). The stronger partnership between the US and EEC increased the interdependence of the two economic entities. Trading agreements ensured the reciprocity between them.

However, for the EEC, their main focus was narrower: on building peace within the six EEC member countries. To bind the six countries, EEC concentrated on recovering the economy and solve the major disagreement among them, which was agriculture. Protectionism was EEC’s first move. The EEC took the chance of unifying the Union’s external tariffs. To recast the existing duties, they needed to recast the rates that constituents had signed contracts preventing them from changing. Those were recorded as “bindings” in the GATT (Walker 1964, 673). If the EEC wished to increase specific tariffs, the EEC would need to cut some other tariffs, and third parties involved must be satisfied. With a lag in agricultural technology, the EEC lowered rates of industrial goods but imposed the variable import levies, which were higher than the constituents’ old tariffs (Walker 1964, 676). However, the US kept trying to open the European market for a more liberal trade regime. The pressure from the US caused the EEC’s reaction. Coppolaro (2009) argued that the Common Agricultural Policy itself was formulated in response to the US’s push for trade liberalization while the EEC would like to decide “how liberal it wanted to be”. The US Committee on Foreign Affairs also stated in the hearings that the Common Agricultural Policy discriminated against the US agricultural products (Committee on Foreign Affairs 1985,172).

The two parties studied in this case have almost the same size, either from population or economic perspective. The real GDP and per capita real GDP of EEC and US was 116.96 and 107.86 in 1961, respectively. It would be difficult to find the vulnerability of one country. According to Krasner, more detailed bilateral trade data need to be studied.

Even though the United States possessed an advantage in agriculture technology, its main export destination was Europe. In 1961, the EEC took 23% of total U.S. agricultural exports. The dollar value of U.S. exports to the EEC was up to 51% of the total U.S. export value in 1961 (Porter and Bowers 1989, 6). For the poultry export, in 1962, the US exported around \$75.8 million to the world, out of which \$50.3 million was to EEC countries (USDA 1964, 75). Therefore, the US agriculture export depended mostly on the EEC market, while EEC countries could easily shift their imports to Denmark, which was the primary source of poultry imports before the US (Patel 2017, 33), or other European countries. The EEC also depended on the US for industrial goods export, which accounted for 50% of total EEC’s export to the US, amounting to \$1.1 million. However, the US exported more industrial goods to the EEC, \$1.4 million, and the overall trade balance of the US against the EEC was a deficit of \$1.5 million. The US has a growing dependence on the EEC while not vice versa (Committee on Ways and Means 1962, 1171).

The interdependence between the two economic entities deteriorated as they were interdependent on an unequal level. A restrictive trade policy on agriculture thus has a larger impact on the US economy than the EEC. In 1963, the US poultry exports to the EEC decreased

to \$23.7 million, or by 55% compared to 1962. While the EEC successfully met the increasing consumption of poultry in 1963 by self-production and imports from East European countries (Warden 1965, 24-30).

Objectives

After World War II, Western European countries were recovering from the war. European countries invested substantially in machinery to boost the development of agriculture. For example, in Germany the average size of farms increased by 19% from 1949 to 1962 (Dam 1967, 211). However, US agriculture was still more efficient than that of Europe. The advancement was due to changing technology. New machinery sharply reduced labor requirements in harvesting. Electrification greatly improved the efficiency of livestock feeding. Moreover, significant post-harvest innovations were found in food processing and food distribution (e.g. frozen foods) (Conkin 2008, 200-212). Thus, the conflict has its roots in the gap of technological development (Talbot 1978).

American advances in technological development lead to agricultural overproduction. As supply increased, the price of US agricultural products decreased, alongside the price of exports. Low-priced chicken in the European countries hurt domestic farmers. Thus, many countries started blaming the US, concerning hormones and arsenic used to raise chicken (Time 1962). Moreover, protectionism was the prerequisite for French participation in Common Market (White 1998, 139), since France is the largest poultry producer and had almost half of the active agriculture land of the EEC (Dam 1967, 213). However, the lag of agricultural technology caused further impacts than just hurting the farmers.

In the late 1950s, agriculture was the most controversial field among EEC constituents as each country adopted its own policy and was hard to cooperate. The decreasing importing prices of agricultural products affected the EEC constituents differently as some were agriculture exporters, who strongly opposed the idea of free trade, and some were importers, who would welcome such a price decrease. Agriculture gradually became the main issue for the EEC and the impediment of the EEC integration (Porter and Bowers 1989, 7). In line with the Realist view, the core objective of the EEC was to maximize its own security. Thus, the EEC began drafting the Common Agricultural Policy, with the main purpose of securing the peace within the EEC and protecting the Common Market's agriculture from competitive North American exports. Even though economically, the Common Agricultural Policy was not beneficial to the EEC, it was politically important unifying the six constituents (Gilbert 2010, 174). Thus, raising the tariff on poultry in 1962 is only a sign of an overall restrictive trade policy on agriculture for Western European countries.

A strict security-maximization strategy from the EEC harmed the US because the US was exposed to the influence effect of the trade. In 1961, the US exported over 68% of all US poultry exports to the EEC, amounting to \$67 million (USDA 1961, 15 and CIA 1963, 1). The increase in poultry tariff reduced the US chicken exports, hurting the American agriculture industry. Moreover, the US feared that increasing tariffs on poultry was the EEC's first step of a protectionist trade policy for agriculture. In 1961, the US agricultural exports to the EEC amounted to \$1.157

million, which was 56.6% of total exports to Western Europe and 23% of total US exports (USDA 1964, 74). A decrease in exports was likely to worsen America's international payment position (Committee on Finance 1962, 1192).

For the US, the protectionism action had a society-centered explanation that national leaders were also concerned with the support from special interest groups whose preferences might affect trade policy formation. After the EEC announced an increased tariff on poultry, the US administration faced enormous pressure from the domestic interest groups. Kennedy's allies, important chicken states, warned that if the president did not stop EEC's protectionism, the Trade Expansion Act would be rejected (White 1998, 149). Therefore, the US fought back with a \$46 million retaliatory tariff. In the meanwhile, the US auto industry was suffering its own trade crisis due to competition from growingly popular foreign cars and trucks, such as Volkswagen from Germany. Therefore, trucks were added into the retaliatory tariffs to persuade the United Automobile Workers Union (U.A.W.) not to strike (Longley 2019).

In addition to retaliation, the US utilized retaliatory tariffs to get the EEC to the table for the Kennedy Round, which was initiated after the enactment of the Trade Expansion Act. Kennedy Round thus acted as a measure to open up the Western European market as access to the European market determines the effectiveness of US's Atlantic trade policy, which is the critical part of the US's general foreign policy (White 1998, 150). Therefore, the Chicken War itself was only a small conflict, but it was a tactic in a larger game (Wolfe 1997, 60).

Tools

Tariff was the primary tool that was used in this case. The conflict originated from the foundation of EEC as EEC needed to come up with a uniform external tariff. EEC intended to change from fixed-rate tariffs to variable import levies. In the meanwhile, EEC's Common Agricultural Policy was still in progress. However, the overall purpose of the Common Agricultural Policy was to protect EEC's agriculture from its competitors. Thus, EEC predicted that the import fees could be higher than the old tariffs.

Both the EEC and the US approached negotiations. From Putnam's two-level game, to achieve a trade deal, an agreement must be reached at both the international level between states and the national level among government and domestic interest groups. From the late 1950s, the EEC and the US had multiple rounds of negotiation, including the Dillon Round, around the new import fees. All those negotiations failed as the EEC insisted on the trade barrier. The only way for the EEC to lower its barrier was to earn substantial gain from trade with the US, which means a sizable overall tariff cut by the US (White 1998, 140). To respond, President Kennedy tried to obtain the tariff-cutting authorities in the Trade Expansion Act (Hedges 1964, 381). However, the US hesitated to meet EEC's demand as the protectionist in the US lobbied against the Dillon Round. Another important reason is that the US did not want to lower its trade protection on manufacturing products from West Europe and lose its advantage on technology (White 1998, 140). The failure of the negotiations can be predicted as the US did not reach agreements at both international and national levels.

In 1962, President Kennedy ran up against the EEC because US farm states pressured the president to fight the restriction, and President Kennedy feared that he would lose their supports if the EEC's protectionism continued (White 1998, 149). However, the EEC's high variable import fees were determined later in 1962, and all constituents substituted it for old fixed tariffs. Thus, the US placed a retaliatory tariff of \$46 million for the trade balance that was influenced by the tariffs increase. In 1963, GATT appointed a panel to evaluate US poultry export to be \$26 million (Walker 1964, 680). The US considered its right had been integrally preserved and acted accordingly. This announced the end of the tariff battle. Even though both the EEC and the US lifted the tariffs imposed on each other gradually over time, the tariff on trucks imposed by the US has not been lifted since 1964 due to the high pressure from U.A.W., who was also the main force leading to the conflict between the US and Japan in the 1980s.

International institutions

GATT was involved in this case from the beginning. Even though the EEC planned to impose protectionism actions under the rule of GATT, it faced difficulties raising tariffs on agricultural products and reaching an agreement with the US. According to GATT article XXVIII, negotiation among interest parties may be called for if one party wishes to modify or cancel any binding. Negotiation between the EEC and the US lasted for 18 months, but still, many unsettled areas were carried over to find a mutually acceptable solution. Those areas included wheat, rice, corn, sorghum, and poultry (Walker 1964, 675).

GATT was established in 1947, only ten years before the conflict broke out. As GATT signatories, the US and the EEC largely follow the commitment they made in GATT. Even the retaliatory tariff of \$46 million announced by the US was compliant with GATT (Walker 1964, 678). However, the restraint of GATT was limited. When EEC decided to protect its own agriculture, it refused to follow the GATT article to compensate affected third parties, including the US, by lowering trade barriers on agriculture. The US acceptance of GATT arbitration was not a success of GATT but a compromise made by the US since President Kennedy had to make actions quickly when facing the pressure from domestic interest groups and wishing to realize his political goals to win the 1964 election. Therefore, it is possible that this conflict between the EEC and the US could be more widespread and prolonged without GATT as EEC may impose more restrictive trade policies, and the US would not compromise soon.

Key takeaways

In a bilateral trade relationship, the party threatened by the advancement of technology from the other is more likely to initiate the conflict by imposing a restrictive trade policy against the other. In this case, the lag of agriculture technology in the EEC compared to the US was the root cause of the EEC's protectionism. We also find a similar pattern in the trade conflicts after this. For example, the US-Japan conflict in the 1980s was to slow down the technological development of Japan. The US-China current trade war also proved this argument as the US was threatened by the technology development in China and initiated the conflict by restricting China's investment in the US technology industry.

Moreover, in a trade conflict, if the two parties are symmetric in terms of economic and political power, the aggressor may utilize retaliation measures to achieve its own economic or political goals. In this case, the US intended to use the retaliatory tariff to protect its auto industry, open the European market, and to realize the national leader's own political goals. In the Natural Gas and Energy case in 1980 among the US, the EEC, and the USSR. The US announced unilateral sanctions against the construction of the pipeline. While as the aggressor, the EEC "retaliated" by continuing to support the pipeline construction to reach its economic goals: either cooperated with the USSR for oil benefits or bargaining with the US for new trade policy. The welfare maximization logic can justify the action by the aggressor, as explained in the framework. In a trade conflict, the aggressors are mostly impacted economically, whether to retaliate or not largely depends on the net economic benefit of retaliation. In a trade conflict with symmetric aggressor and aggressor, the aggressor is not entirely more vulnerable than the aggressor. Thus, the economic cost of fighting a trade conflict may not necessarily exceed the benefits, especially when the aggressor could achieve other political goals through retaliation.

The outcome of the case was that two parties ended with a tie, each imposing a tariff amounting to \$26 million to the other. It was difficult to identify who was the more vulnerable one in this case. However, the EEC acted as the more hawkish one while the US mainly sought negotiation, instead of retaliation, as the counter-measure. The EEC took the protectionism on agriculture as the way of integrating its constituents (Patel 2017, 36), while the US was pursuing its "Atlantic framework", incorporating Europe as a partner but under US's leadership. The new trade relationship with Western Europe was significant to the US foreign policy (Lundestad, 2003). Moreover, the US depended on the EEC in agriculture export as the EEC accounted for more than half of US exports to Europe, and the US had a net import of industrial goods and an overall trade deficit from the EEC (Committee on Ways and Means 1962, 1168). Thus, the US hesitated to act against the EEC. Both parties took losses for a bigger picture. The EEC had to increase its support for agriculture to account for the import decrease of \$130 million in 1963 (Warden 1965, 27). France alone increased its support by nearly \$90 million (Food and Agriculture Organization 1963, 68). On the other hand, the US accepted the loss of \$26 million offered by GATT, \$20 million less than the US estimated, and made \$8.5 billion tariff concessions during the Kennedy round, but strengthened its partnership with the EEC (Norwood 1969). The actions taken by both parties were in line with the Realist view analyzed in the framework that countries tend to endure the welfare losses from trade if they could gain other economic benefits or achieve certain political goals.

Oil Crisis 1970s

Summary

On October 17, 1973 - the "energy Pearl Harbor Day" (Ikenberry, 2018) - the United States and its allies were attacked in an unusual way. The oil ministers of Arab states gathering in Kuwait City agreed to an oil embargo against the United States and its allies, establishing a schedule of production cuts for the upcoming months. Three days later – after Richard Nixon announced a \$2.2 billion military aid package for Israel – Saudi Arabia consented with the complete ban of all oil exports to the United States and its closest allies. The oil embargo, carried out by all the Arab

oil-producer countries, remained in effect for six months, until March 17, inflicting acute economic and political harm in the United States and the Western alliance. The deployment of the “oil weapon” aimed ultimately to punish the United States for its open support to Israel, particularly in the context of the Yom Kippur War. Although the United States did not cease its support to Israel, the “oil weapon” gave political leverage to Arab countries – eventually leading to territorial rearrangements in the Middle East and to a split in the Western Alliance. The “oil weapon” was effective because the United States and the other Western countries were heavily dependent on the Arab oil and could not shift their energetic needs to alternative sources in a short period of time.

Actors

The relations of the United States with the Arab countries in the decades following World War II were complex. Still, we can say that the United States was an ally of the most relevant OPEC country in terms of oil-exporting capacity: Saudi Arabia. From 1945 to 1973, two fundamental pillars of the American foreign policy were the security oil supply – not only for itself but also for its allies – and the containment of the global influence of the USSR (Krasner, 1979). As such, the Middle East played a pivotal role in the American foreign policy after World War II. The attainment of its strategic global goals relied on the maintenance of friendly conservative regimes in the Middle East, particularly in Saudi Arabia. Therefore, the most relevant OPEC country was a close ally of the United States. However, other OPEC countries – namely, Libya, Iraq, and Algeria – had an opposition stance against the role of the United States and the American major oil companies in the Middle East. Those three countries, alongside Egypt and Syria, had been advocating for the use of the oil weapon at least since early 1973 (Yergin, 2011), but they could not be successful without the support of Saudi Arabia, which had become the global oil supplier of last resort in the early 1970s.

The Saudi regime opposed the mix of oil and politics since it relied on the United States for its own stability, in a context of growing Soviet influence in the region and emergence of radical nationalist political movements. Moreover, in 1967, the Arab countries had engaged in an attempt to weaponize trade restrictions. Back then, though, they were unsuccessful, as the United States still had idle capacity to increase its own production and so secure the supply of the Western block (Keohane, 2005). The result was a large loss in income with no political gain (Yergin, 2011). The Saudi kingdom did not want to repeat the same mistake, which also explains its opposition to the employment of the “oil weapon”.

The Saudi stance evolved rapidly in October 1973, when the United States sent a cargo airplane full of military supplies to Israel in the daytime during the Yom Kippur War. As analyzed by Yergin (2011), it became politically impossible for the Saudi government not to react to the active role of the United States in a war between Israel and other Arab nations. The American side tried to convince the Saudi that the American support to Israel should be taken as part of a conflict against the USSR - and not as anti-Arab provocation. However, pressures from the domestic public opinion and other Arab countries - especially Egypt, which could look for Soviet support if left unassisted by the Saudi government - pushed King Faisal to act (Yergin, 2011).

Therefore, although the United States and Saudi Arabia were allies, the intricate political networks in the region ended up leading the Saudi kingdom to side with the other Arab countries and aim the “oil weapon” at the United States. Probably because the two most relevant sides in the dispute were politically close, the United States refrained from using military or economic means to put pressure into the regime. A strong reaction - such as armed or economic retaliation - could be counter-productive for the most high-level priority of the United States in the Middle East during the Cold War: Limiting the communist global influence (Krasner, 1979). A weak regime in Saudi Arabia could have made the most important oil exporter an easy target for the spread of radical regimes. As Keohane (2005) described the situation, “Arab nationalisms, the increasing sophistication of indigenous Middle Eastern Armies, and the rise of Soviet political influence and ability to project military power in the area all made a difference”. In this sense, the concept of security externality is useful to explain the response of the United States. The United States refrained from imposing harsh economic retaliation because the Saudi regime was an important regional ally, and so inflicting economic harm to it would have a negative impact in its broader strategy for the Middle East. That is arguably why the conflict did not escalate.

The Arab oil-exporters were, even when taken together, were economically small in comparison to the United States and its allies. However, they managed to inflict massive economic pain in the Western alliance. The reason for that is that the dependence of the United States, European countries, and Japan to the Gulf oil increased rapidly after World War II. Rapid economic growth in these countries and a cheap supply of oil from the Middle East led them to neglect policies to limit their energetic vulnerability. Domestic interest groups prevailed politically against the need of economically costly, but strategically important, measures to limit dependence on foreign oil. For example, the United States maintained until 1973 a policy of import quotas to protect domestic producers, which led to a rapid reduction in the domestic reserves of oil.

In 1967, the United States was already a net oil importer, but it still had idle capacity amounting to 25% of its yearly consumption. In a six-year span, that changed dramatically: the American net position (imports minus domestic excess capacity) had reached 25% of its yearly consumption (Keohane, 2005). Although there had been internal alerts about the vulnerability of the United States to the politicization of oil trade (Yergin, 2011), the country opted for not incurring into a preemptive economic adjustment - by either reducing dependence on oil or stimulating alternative domestic sources. Keohane (2005) argues that this was because the broader national interest of having energy autonomy did not resist the pressures of smaller societal interests - such as the demands of small oil producers for quotas and efforts to fight inflation by capping energy prices. The fact is that, in 1973, the United States was vulnerable to economic pressure by relatively small countries.

Objectives

The main objective of the oil embargo was to punish the United States for its support to Israel in the Middle East. This is a very clear example of trade weaponization aiming at foreign policy interests. After the United States sent a cargo aircraft to resupply Israel during the Yom Kippur war and a \$2.2 billion military aid package to Israel, it became politically untenable for the Saudi Arabia not to show support to the Arab side in the war. The oil weapon was the instrument

the Saudi government employed to show support to Egypt and Syria, and hence leverage its regional influence.

Egypt and Syria, the belligerent countries in the war and main advocates for the embargo, ultimately wanted to reestablish negotiations with Israel, which would only be possible if the war ended at least in a draw - reverting the humiliation suffered in the Six-Day War in 1967. According to Yergin (2011), Egypt was in economic ruin in 1973, with military expenditure mounting up to 20% of its GDP. Anwar Sadat – the Egyptian president who succeeded Gamal Abdel Nasser in 1970 – “wanted to break out the cycle of conflict with Israel, and out of stalemated diplomacy”. Somehow ironically, the strategy he set to attain this objective was to go to war against Israel, in order to go back to the negotiation table in a better position.

The weaponization of trade, in that case, precipitated the end of the Yom Kippur War, opening the way for leveled negotiations. Therefore, Egypt managed to attain its political objectives. Similarly, with the “oil weapon”, Saudi Arabia managed to convince the United States to start negotiations with Syria on the Golan Heights issue. These developments - opening talks on Sinai and Golan Heights, important territories occupied by Israel in 1967 - were crucial and signaled a new stance of the United States vis-a-vis the Arab countries. Indeed, in June 1974, Richard Nixon visited not only Israel and Saudi Arabia, but also Syria and Egypt - showing the new diplomatic status of the two countries. Saudi Arabia, on its turn, proved the political might it got from its oil reserves.

Tools

The Arab oil-exporters initially restricted and eventually banned all the exports of oil to the United States and some of its closest allies – namely, the Netherlands, Portugal, South Africa, and Rhodesia. The oil embargo followed the formula described by the Saudi Minister of Oil and Mineral Resources Ahmed Zaki Yamani: “If you are hostile to use you get no oil. If you are neutral you get oil but not as much as before. If you are friendly you get the same as before,” meaning that all countries could potentially be targeted for their stance - and even for neutrality - vis-a-vis the Arab countries.

By being able to target specific countries and securing supply to “friendly countries”, the Arab oil-exporters managed to split the Western alliance in the acutest way since World War II. Indeed, as put by Keohane (2005), the American hegemony among those countries was partially built upon its capacity to secure their access to oil. In the Suez crisis, for example, the United States managed to secure access to oil to the UK and France, by using alternative sources in the United States itself and Venezuela. Once the United States became itself a net oil importer, that created vulnerabilities for its allies as well. Western Europe imported 60% of its energy needs, where in Japan this percentage was as high as 80% (Keohane, 2005). Following the embargo, the United Kingdom and France adopted a friendly stance vis-à-vis the Arab countries, “putting pressure on the United States or Israel” (Yergin, 2011). In November 1973, the European community adopted a resolution declaring its support to the Arab position in the Arab-Israeli conflict. Japan also changed its foreign policy lines, shifting from alignment with the United States to a pragmatic “resource diplomacy” (Yergin, 2011) and adopting a “pro-Arab declaratory policy” (Keohane,

2005). In this sense, the “Oil Weapon” was successful in isolating the United States in the Middle East and forcing its allies to shift their foreign policy stance. This can be seen as a relevant achievement for the Arab countries, as it improved their negotiation position in regional matters.

The United States avoided a conflict escalation because the prevailing geopolitical conditions were not conducive to a firm response against Saudi Arabia. As such, its first initiative was multilateral, by encouraging the coordination of industrialized countries in energy issues. The idea, sponsored by Henry Kissinger, was to set a “floor price” on which importer and exporter countries would agree. That would open the way for more constructive negotiations with the OPEC, and create the price-stability needed for long-term investment in energy sources (Ikenberry, 2018). European countries, though, did not agree with such a strategy – as they would have to bear the adjustment cost with no prospect of developing their own oil production. These debates resulted in the creation of the International Energy Agency (IEA), whose mission was centered on emergency sharing system, demand restraint, and stockpiling policies (Keohane, 2005). The agency, however, was not successful in coordinating the response of its members, as shown in a run for stockpiling oil following the second oil crisis in 1979, which was responsible for the price hike following the Iranian Revolution.

The main proponent of the oil weapon, Anwar Sadat, ended up becoming “the chief advocate for its cancellation” (Yergin, 2011). With the opening of talks with the United States and Israel, the continuity of the embargo would only make the progress of negotiations harder. For Saudi Arabia, having proved its support for the Arab cause and expanding its regional influence, long-lasting economic warfare with the United States would also be politically and economically irrational. On March 18, the Arab oil ministers agreed to put an end to the embargo.

International institutions

Although the GATT’s article XI banned export quantitative restrictions, that was not a relevant constraint for the OPEC countries, since they were not members of the agreement. Saudi Arabia, for example, joined the WTO in 2005 only. Because of the political motivations of the conflict, which involved high-stake territorial disputes, it is probably that even a strong international trade regime would do little to avoid the conflict - as the Arab states would probably be willing to accept some degree of economic retaliation to push for a *status quo* change in the region.

Key takeaways

The oil crisis showed that small countries can inflict substantial economic harm onto big countries, change regional political dynamics, and even promote a long-lasting split into the leadership role of the hegemon. The vulnerability of the United States and its allies to the oil weapon was built over years of deepening asymmetric interdependence, in which the blessing of cheap oil ended up turning into a curse. As Hirschman (1980) wrote, “*fortuna est servitudo*” when it comes to foreign trade. As Keohane (2005) suggests, the strategic interests of the United States did not have the upper hand domestically against sectoral domestic interests, such as the inflation

fighting and protecting small oil producers. Indeed, when there is no binding restriction, countries can simply postpone costly adjustments and allow vulnerabilities to grow bigger.

In the case of the oil dependence, it was not on the top of the political agenda until the embargo was effectively announced. Just a few days before the oil embargo, Henry Kissinger told advisors that “it was unlikely that the Arabs would use the oil weapon against the United States” (Yergin, 2011). Although some agencies within the US government were aware of the risk of energetic dependence on Gulf sources, that view did not prevail in the American foreign policy decision making. Rather, the policy adopted in the 1950s and 1960s aimed to protect small domestic producers, by introducing an import quota, which not only encouraged collusion among foreign producers but also led to a faster usage of domestic reserves, increasing the United States dependency on foreign oil.

From a strictly Realist perspective, a security-maximizing state would not have accepted such a degree of vulnerability to other countries. It turns out that policies have some degree of inertia. As put by (Krasner, 1976), “once policies have been adopted, they are pursued until a new crisis demonstrates that they are no longer feasible” because “states become locked in by the impact of prior choices on their domestic political structure”. In this case, in a span of only six years the United States moved from the position of the oil supply of last resort to a position of dependency on foreign sources. Since several interests benefited from the status quo - i.e. big oil acting in the Gulf, small oil taking advantage of higher prices stemming from the import quota, and even the foreign service establishment that wanted to promote the economy of some key Middle Eastern partners of the United States - policy simply did not change to address the increasing external vulnerability. A binding shock, though, led countries to start an overdue adjustment process. Indeed, after 1973, countries of the Western alliance started to reduce their oil dependence in several ways. The United States started the implementation of the so-called Independence Plan, which involved massive federal finance to investment on alternative energy technologies. However, as put the Ikenberry (2018), the scheme of price controls established in efforts to limit inflation disincentivized domestic production, despite the State-support to R&D in the energy sector. Still, the Establishment of the Strategic Petroleum Reserve, in 1975, improved the American position in future crises in the Middle East, such as the Iran-Iraq War - although the practice of uncoordinated stockpiling ended up causing the price hike following the Iranian Revolution in 1979. Other initiatives - such as the 1980 Energy Security Act - aimed to promote a switch from oil to alternative energy sources, such as hydropower. All these developments, combined with the emergence of other oil suppliers around the world, including Russia, mitigated the political vulnerability of Western countries vis-a-vis the Arab oil exporters.

A key takeaway of this case study - which somehow deviated from our more structural approach - is that situations of rapid shift in structural variables affecting economic interdependence - in this case, the loss of energetic autonomy of the United States at the end of 1960s and a shift in the stance of Arab states - creates opportunities for trade weaponization. Conversely, trade weaponization in these situations can accelerate economic adjustment aiming to mitigate the effects of asymmetric interdependence. To some extent, this can give us relevant insights to analyze future trade wars.

On the other hand, this case also reinforces the relevance of security externalities in the evolution of trade-related conflicts. Even without a multilateral framework, there was no retaliation by the United States, which arguably wanted to avoid inflicting economic harm on an ally in the context of a very competitive security-system during the Cold War. The hypothesis that in geopolitically motivated trade weaponization countries tend to be willing to endure more economic harm is also backed up by the example of the Oil Crisis of 1973. This may explain why the United States - albeit vulnerable - did not give up to the OPEC pressures and continued to support Israel at a very large economic cost.

US-Japan 1980s

Summary

At the start of the 1980s, the Japanese economy was booming whereas the United States was experiencing a recession. In 1980 Paul Volcker - the Chair of the Federal Reserve - raised the Federal Funds Rate to its highest level in history, responding to US double-digit inflation. This became known as the Volcker Shock, and was followed by President's Ronald Reagan's economic policy, or Reaganomics. In addition to tighter monetary policy, government spending, federal income and capital gains taxes and government regulation were reduced (Henderson). Throughout this time period, Japanese exports grew rapidly, increasing competition with US goods namely in the auto manufacturing industry. US market shares held by imported Japanese goods increased, as the US trade deficit with Japan widened (Katzner 3-4; Samuelson). Moreover, the Japanese were suspected of manipulating its currency to improve competitiveness of exports, widening the trade deficit. Responding to US concerns, Japan agreed to voluntary export restraints (VERs) in 1981 and the removal of tariffs on US automobile parts (Katzner 10-11). Yet the trade imbalance and strain on US manufacturers remained. The US accordingly employed protectionist trade policies, including tariffs and import quotas on Japanese export industries, namely automobiles (Bransteter; Crandall 271). Japan did not retaliate with protectionist measures of its own, and by the end of the 1980s Japan had entered a recession.

Actors

Both the US and Japan were GATT signatories (WTO). Nevertheless, the trade tensions of the 1980s were underpinned by the recent history of Japanese protectionism. Throughout the 1960s and 1970s, the Japanese economy had flourished; and in the twenty years following the end of World War II, Japanese annual GNP was second only to that of the US (Katzner 4). The Japanese growth strategy relied heavily on protectionism. In 1967, Japan levied a tariff of 30-40% on foreign auto imports, to which a 15-40% domestic commodity tax was added. As a result, in 1966 Japan imported only 15,732 vehicles, compared to total domestic production of 2,286,399 vehicles (Katzner 5). The next 25 years of US-Japanese relations were preoccupied with efforts to reduce trade barriers and increase Japanese import of American cars. Therefore, the conflict of the 1980s continued a history of protectionism.

The US continued the trend of protectionism initiated by the Japanese, but the economic composition of the two countries meant these pressures were felt differently. Not only was the US economy larger than that of Japan, but the latter's economy was much more sensitive to trade restrictions, given the composition of its GDP from trade. In 1981, US GDP measured in current dollars was over 2.5x as large as Japanese GDP. However, per capita GDP, again measured in current dollars, was more comparable; US GDP per capita was approximately 1.4x that of Japan. However, the countries did differ significantly in their sensitivity to trade. The US trade-to-GDP ratio was 19.4%, whereas that of Japan was 27.63% (World Bank). Moreover, consider the following graph of bilateral imports and exports as shares of total imports and exports for the US and Japan, sourced from the Peterson Institute for International Economics (PIIE).

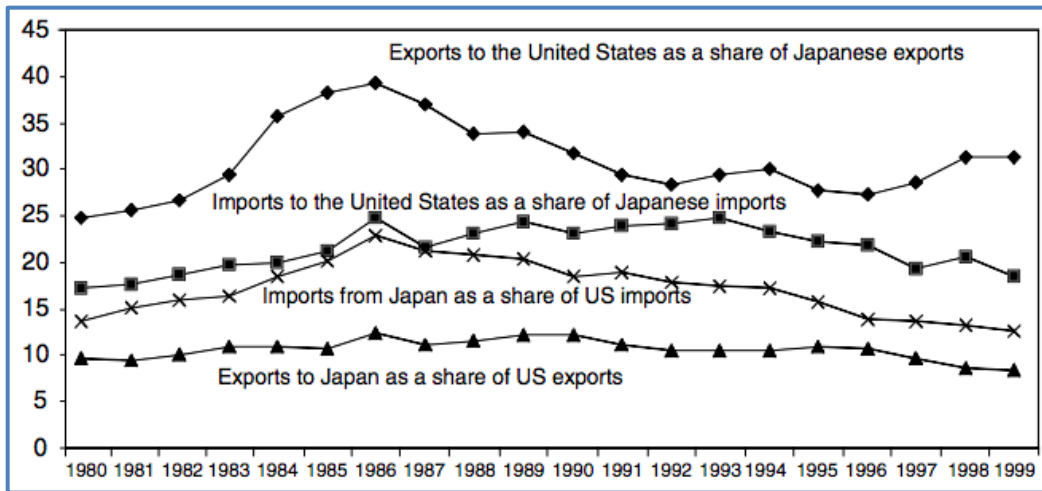


Figure 9: US and Japanese relative export and import dependence

In 1981, approximately 10% of US exports were to Japan whereas approximately 25% of Japanese exports were to the US. Approximately 15% of US imports were from Japan, whereas approximately 20% of Japanese imports were from the US. In terms of bilateral trade, the US economy was less dependent on Japanese trade than was the Japanese economy on US trade. Therefore, the same trade restrictions imposed on Japan and the US would be more likely to impact the Japanese economy. Overall, the US had the economic upper-hand at the time of the trade conflict. Despite low US penetration of its car industry, Japan was economically dependent on the US, resulting in limited bargaining power to counteract the US (Griffiths). Thus, despite similar protectionism from Japan in earlier decades, US policies may be anticipated to impact its target differently.

In addition to being grounded in a history of similar policies, protectionism against Japan was supported politically by US citizens. Addressing trade concerns with Japan via protectionist trade policy was viewed in the US as politically favorable, and not only for domestic auto manufacturers who themselves would be protected. US President Ronald Reagan politicized the car industry both in the 1980 and 1984 presidential elections. In 1980, he campaigned on the promise of a tougher stand on Japanese imports (Katzner 10-11). And in 1984, then-presidential candidate Walter Mondale, campaigning against President Reagan, famously asked: ““What do we want our kids to do? Sweep up around the Japanese computers?”” (Samuelson).

Objectives

The US weaponized trade in service of both narrow sectoral and broad economic aims. Of course, these policies aimed to appease US automobile manufacturers, a key domestic constituency. At the start of the 1980s, the US was in a recession; unemployment was rising towards 10% and inflation was high. US companies, particularly car companies like Ford, General Motors and Chrysler, sought protection from foreign competitors like Toyota and Nissan (Gillespie). US politicians accordingly wanted to provide domestic producers with breathing room to adjust to changes in the world market conditions (Crandall 278).

However, concerns for auto manufacturers were situated within broader economic concerns regarding the country's trade deficit with Japan. The US was concerned about the magnitude of the bilateral trade imbalance, and hypothesized that it was unfairly exacerbated by currency manipulation. The US accordingly weaponized trade to pressure Japan to open its markets and address said currency manipulation. In 1985, the US sold \$190 million worth of car parts to Japan, while Japan exported \$5.2 billion worth of Japanese parts to the US (Katzner 17). And in addition to trade balance concerns, the US Government claimed that Japan had unfairly depreciated the yen to further increase the attractiveness of Japanese imports. The US aimed to end this unfair trading practice, and in turn address its concerns regarding its trade deficit. Between 1979 and 1985, the real value of the U.S. dollar appreciated by roughly 60% (Crandall 271). As US exports became more expensive relative to foreign-produced goods, their competitiveness declined. This was exacerbated by concerns that Japan had further, and unfairly, depreciated its currency against the dollar. Moreover, American automobile manufacturers complained that the weak Japanese yen relative to the dollar gave superior profit margins to Japanese motor companies selling cars in the US (Katzner 14). Therefore, US trade restrictions aimed to pressure Japan to address its devaluation of the yen.

The US's weaponization of trade was motivated both by narrow and broad economic aims. Protectionist tariffs on auto imports did protect domestic manufacturers. And in service of broader economic aims, weaponization successfully compelled Japan to address unfair currency practices. Arguably, objectives were geopolitical, as the US may have viewed its trade imbalance with Japan as undermining its relative power. Perhaps the US was threatened by the perceived imminent industrial and technological catch-up of Japan, motivating trade weaponization. Despite its broader objectives, weaponization was not wholly successful. While it reduced the trade deficit, it did not eliminate it. In 1985, Japan signed the Plaza Accord with the US, West Germany, France, and the United Kingdom. The agreement devalued the US dollar against the Japanese yen, making US exports relatively more attractive. The US successfully reduced its trade deficits with many Western European countries, however that with Japan persisted (Griffiths). Still, appreciation of the yen was achieved. Despite the more favorable exchange rate, the US trade deficit with Japan did not disappear. However, it did decline. Trade was weaponized to protect a domestic constituency (auto manufacturers) and to address the broader economic concern of a sizable trade deficit. In the short term, the narrow economic objective was reached but the broader economic objective continued to plague the US.

Tools

Throughout the 1980s the US employed the following trade tools: constraining Japanese imports via VERs, and import tariffs. Coupled with these trade tools were diplomatic tools, namely the negotiating and signing of the Plaza Accord. In 1981, under pressure from the Reagan administration, Japan agreed to limit the number of cars it sold to the US, known as a voluntary export restraint (VER). The Japanese agreed to institute a three-year export quota of 1.68 million vehicles. However, this was not far below the total level of Japanese car imports in 1980, of 1.98 million. (Samuelson; Katzner 11-12; Crandall 274). In 1984, the restraints were extended for one year at 1.85 million passenger cars, and in 1985 they were extended again for one year at 2.3 million units. (Crandall 274). However, these measures did not do much to lower the trade deficit, and American trade policy against Japan became increasingly protectionist.

After addressing suspected currency depreciation in 1985 with the Plaza Accord, America's trade deficit with Japan remained. And in 1987, the US accordingly imposed 100% import tariffs on \$300 million worth of Japanese imports, effectively blocking them from the US market. These included Japanese computers, power tools, and TVs. Soon after, the yen continued to appreciate. The country's central bank attempted to suppress the yen's value, but in doing so sparked a stock price bubble, helping to push the economy into recession (Griffiths). The Accord and the tariffs, were not solely responsible for Japan's economic downturn, but certainly contributed to the strain on Japan's economy.

Throughout the conflict, Japan did not retaliate with protectionist trade policies of its own. As mentioned above, Japan was an easy target for the US given its political and economic dependence on the US. Therefore, it had limited bargaining power to counteract the US (Griffith). Moreover, perhaps its ability to respond was further eroded by its weakened economic position at the end of the 1980s. After more than three decades of incredible growth, Japan's equity and real estate bubbles burst beginning in the fall of 1989, ushering in what came to be known as the "Lost Decade." Still, after President Reagan left office in 1989, the US trade deficit in Japan continued. And in 1991, the deficit was approximately \$43.4 billion, accounting for approximately 66% of the entire world-wide U.S. trade deficit. Three quarters of the deficit with Japan was directly related to automobiles and car parts (Katzner 21).

International institutions

Both the US and Japan were GATT signatories. Under GATT, countries are more likely to use bilateral agreements (i.e. VERs) to substitute for tariff increases that could not be imposed unilaterally under the agreement (Crandall 272). It follows that GATT likely constrained US trade restrictions at the start of the conflict, as it relied on VERs in the early and mid 1980s. Additionally, the US sought a diplomatic resolution with Japan via the Plaza Accord. However, these measures proved ineffective at eliminating the trade deficit and helping US manufacturers. Therefore, despite having signed the GATT, the US levied import tariffs on Japan in 1987. Without GATT, it is possible that the US would have sooner levied tariffs, as opposed to relying on VERs and diplomatic agreements. GATT did have an effect in terms of constraining the aggressor, but only

up until a certain point (when the US deemed non-tariff measures ineffective). Now, as a member of the WTO, America's ability to apply unilateral trade sanctions to individual trading partners is limited (Bransteter).

Key takeaways

The US weaponized trade to achieve both sectoral economic concerns (protect the domestic automobile industry) and macroeconomic concerns (reduce the sizable trade deficit with Japan). To reduce said deficit, the US pressured Japan to further open its market to US exports, and to appreciate its currency relative to the dollar. The US imposed tariffs on Japan, to which the latter did not retaliate. Nevertheless, this case was not a resounding "win" for the US. While the US succeeded in addressing alleged currency manipulation via the Plaza Accord, the trade deficit persisted. Key takeaways include that weaponization emerged within the context of historical protectionism. Prior to this trade conflict, Japan had in place protectionist measures against the US similar to the studied US tariffs. Secondly, the US employed weaponization only after other means of achieving its aims - VETs and diplomacy - proved ineffective.

As explained in the Analytic Framework, the effectiveness of trade weaponization is determined in part by asymmetric interdependence. This interdependence is a function of comparative size and economic development, and bilateral trade. The economies of Japan and the U.S. were not balanced, such that Japan was relatively more vulnerable to weaponization. This was magnified by their bilateral trade relationship; Japan's exports and imports to and from the US were greater in percentage terms than those of the US to and from Japan. Our framework accordingly predicts that Japan would therefore be vulnerable to weaponization, supported by the signing of the Plaza Accord and lack of Japanese retaliation against tariffs.

But in spite of US economic preponderance and Japanese vulnerability to weaponization, the US failed to achieve its goal of reducing its trade deficit with Japan. Perhaps this was not an example of ineffective weaponization but rather of unrealistic goals. According to research by the Federal Reserve Bank of San Francisco, the large trade imbalances between the two nations were primarily due to basic macroeconomic factors (i.e. savings) rather than any existing trade barriers imposed by the Japanese, for example lower unit labor costs (Burton-Christie). Even if vulnerability suggests weaponization would be effective, the underlying goals of the aggressor must be realistic.

Natural Gas and Energy 1980s

Summary

The US had double standards in dealing with the USSR: it both tried to prevent technology and hard currency from flowing into the USSR, while at the same time it was keen on selling its agricultural products to the USSR's starving population (Keefe et al., 1991). It thus in July 1982 used the declaration of Martial Law in Poland (which had been declared to contain labor unions' strikes) to impose sanctions against all companies taking part in the construction of the Urengoy

gas pipeline from Siberia to Europe. To stop the pipeline construction, it ended all exports of relevant technology for the pipeline to Europe. The USSR had not received this material before anyhow.

These sanctions were fueled by US fears that Europe grew dependent on Soviet gas and by the wish to keep capital and advanced technology out of the USSR, while deterring it from intervening in Poland. The applied measures stood in line of a series of US political developments since the end of World War II, to use trade tools for the furtherance of foreign policy objectives. However, its measures were unsuccessful and quickly strapped (just four months after imposition). Applying our *Analytical Framework*' analysis tools, the key variables determining the US' loss in this trade war become clear:

Europe's determination to achieve its goal, low economic pain inflicted on it by the US sanctions due to little European dependency on the restricted US products, strong trust within the Western alliance and a diplomatic way out through NATO's negotiation facilities won the day.

Europe was determined not to abandon the pipeline project, as it was keen on getting independent from Middle Eastern oil and gas, as well as on developing a better relationship with the USSR. This political objective granted it a high economic pain threshold. Meanwhile, its domestic industry could replace the now-missing US materials. The interest groups in Washington D.C. on the other hand, who had lobbied for the sanctions to harm the USSR's economy and attack it in non-military ways, got their will through a new "East-West policy" on trade with the USSR. This policy was agreed upon by all NATO members and included strengthened checks on exports of technology and finance to the USSR.

Actors

In the 1980s, the Cold War was raging. The USSR had invaded Afghanistan in 1979 and the US had boycotted the Olympic Games in Moscow in 1980. On both sides of the Iron Curtain, policy-makers weighed every decision they made, taking into account benefits and disadvantages it might bring about for the opponent on the other side (Braathu, 1983). In this setting, Western Europe was clearly allied with the US, last but not least through the North Atlantic Treaty Organization (NATO), founded in 1949 with the goal to "keep the Soviet Union out, the Americans in, and the Germans down." (Lord Ismay, n.d.). However, several European countries, among them Germany and France, were interested in a détente with the USSR (Nephew, 2019).

Despite this constant conflict, the USSR and US remained trading partners, albeit at a modest degree. Trade between the United States and the Soviet Union averaged about 1% of total trade for both countries through the 1970s and 1980s. It peaked in 1979 at US\$4.5 billion, exactly 1% of the United States' total trade of the time (Braathu, 1983). Due to superior quality of US agrarian produce (which made up $\frac{3}{4}$ of US exports to the USSR) and technology ($\frac{1}{4}$) and the USSR's need for both, the bloc faced a trade deficit with the US when the presently analyzed trade conflict took place.

In general, the USSR was little exposed to trade, since its currency, the Ruble, was not convertible (Keefe et al., 1991). However, it also was able to borrow dollars through its banks in Europe. This came in handy when the USSR faced grain shortages in the early 1980s and needed to import large amounts of wheat and corn. At the time, the USSR's economy was down and growth was stagnating (Braathu, 1983). The bloc thus put quite considerable hope on trade in fossil fuels with Europe.

Before building the pipeline, in 1980, West European exports to the USSR were marginal. They accounted for less than 0.5% of the combined GNP of the OECD. Western Europe also was almost completely independent from the USSR's petrofuels: Soviet oil provided 3% and natural gas 2% of all energy consumed in Western Europe (Braathu, 1983). However, from 1970 to 1986, USSR gas exports rose from 1% to 15% of all USSR exports to the West.

This rise in energy supply, a potential improvement of relations between the EEC and the USSR, combined with the USSR receiving hard currency, pumping equipment, and large-diameter pipe, worth billions of US\$ (Nephew, 2019), was the apple of discord between the US, the USSR and the European Economic Community (EEC). West Germany for example lent the Soviet Union \$4.75 billion toward the total cost of \$10 to \$15 billion of building the pipeline (Gwertzman, 1982).

While the EEC wanted to trade more with the USSR, its exporters were already considerably dependent on the US market. In the beginning of the 1980s, the US's trade deficit with Western Europe ballooned from \$16.2 billion in 1981 to \$121.9 billion in 1985 (U.S. Census Bureau, n.d.), concurrent with this trade conflict. From 1981 to 1982 it jumped by 49% to \$24.2 billion, due to the strong US-Dollar. Western Europe benefited handsomely. Trade with France, Germany, Italy and the UK accounted for nearly 40% of the US' trade deficit in 1985 (U.S. Census Bureau, 2020). This gave the US a lot of leverage over the EEC, should it decide to limit imports from the EEC, which in this case it did not do.

Meanwhile, political tensions within the Soviet bloc became more and more obvious. In 1980-81, Polish workers pushed their demands for independent trade unions and the right to strike. Due to the threat of invasion by Soviet forces, Polish security forces began to quell disturbances and the government declared martial law. In light of these events, the USSR needed economic success and an inflow of foreign capital to showcase its strength and advantages to its own population. Fear of dissolution of the bloc had already caused it to militarily intervene in Hungary and Czechoslovakia (Nephew, 2019).

This inner conflict in the USSR did not go unnoticed in the US, where two different approaches to trade fought for influence in foreign policy-making. The first was the dogma of free trade, the second one the use of trade tools to achieve strategic foreign policy objectives, such as weakening the USSR. Since the 1930s, the US political fault line on trade had been economic. US policy-makers even sought out "trade winners" like exporters and got them engaged politically. Overall, free-trade advocates won out against the "slippery slope" of protectionism (Destler, 2016).

However, in 1979, Congress passed the *Export Administration Act*. It allowed for trade controls on the basis of 'foreign policy' considerations. These added to the regulations related to 'national security' controls. This new tool gave the US the opportunity to not only impede Soviet

economic and/or military capabilities, but also to signal displeasure and concern over the foreign, or even domestic, policies of the Soviet Union.

This stance was extensively propelled by a group of neo-conservative and influential intellectuals, who had formed the “Committee for the Free World”. It was their declared goal to further the Soviet Union’s “disintegration from within”, by denying Eastern Europe and the Soviet Union “Western loans, Western grain and, above all, Western technology.” (Hearing, 97th Congress, 1983).

This policy stance had caused several rifts between the US and the EEC already before 1982: in 1962 the USA almost caused a constitutional crisis in Germany, when the governing CDU party under chancellor Adenauer had to walk out of the quorum to stop a vote from happening. It did so in order to secure support for a US embargo against selling pipes to Russia for another pipeline (Braathu, 1983). EEC politicians also deemed the cooperation with the USSR in energy politics beneficial for ongoing peace efforts (Director of Central Intelligence, 1982).

Objectives

As explained above, the geopolitical objective of harming the Soviet Union by denying it Western technology and capital lay at the heart of the **US**’s sanctions against the pipeline. Additionally, it was fixated on keeping Europe independent from Soviet fossil fuels and deterring the USSR from intervening in Poland (Nephew, 2019). Adversely, the **USSR** was in desperate need of precisely this capital to build the pipeline and to get petroleum revenue to cross-finance its economy. Its main objectives thus were of economic and domestic politics nature. The access to Western petroleum technology additionally was both an economic and a security consideration. Meanwhile, it could exploit the rift within NATO over the pipeline project and indeed strengthen Europe’s energy dependence on Eastern gas (Director of Central Intelligence, 1982). **Western Europe**, on the other hand, struggling with an economic downturn in the aftermath of the two energy crises in the 70s, was more focused on getting independent from OPEC oil than worrying about possible future Soviet energy blackmailing (Director of Central Intelligence, 1982). The additional cash from selling pipeline material came in handy as well (Nephew, 2019).

The pipeline was built, constituting a clear failure for US policy-makers. However, a new “East-West trade policy” was introduced after NATO-led negotiations. This new policy made future cooperation between Western Europe and the USSR considerably more difficult.

Tools

The first US step to prevent the pipeline’s construction were diplomatic: The US offered alternative energy supplies to Germany, such as coal or nuclear power. Both offers were rejected in summer 1981. Shortly after martial law was declared in Poland on December 11, 1981, on December 29, the US announced unilateral sanctions against the construction of the pipeline. Besides several direct measures against the USSR, such as suspending Aeroflot flights to the US,

it prohibited US-based companies from participating in or licensing material for the pipeline's construction. This measure did not bear fruit.

In July 1982, as Europe continued to support the construction of the pipeline, the US thus turned its sanctions into a full-fledged export ban on technology for the transmission and refining of oil and natural gas: any foreign company using or licensing US-made equipment for the construction of the gas pipeline would be prohibited from making business in the US, or even face financial penalties, as for example the French company Dresser. However, these measures were hardly effective. As the US-industry put it, who were losing out on \$2 billion worth of contracts: "The Soviets get the equipment, the French get the sale, and the US gets left out" (Braathu, 1983).

In addition to political and economic tools, the US even applied intelligence measures.: The CIA unsuccessfully tried to sabotage the pipeline. The agency delivered malfunctioning products to the USSR, causing parts of the gas pipeline to blow up. It failed, however, to grind the construction down to a halt. The only answer critical of the restrictions came from the French government, calling the US sanctions illegal. Other than that, everybody just proceeded building the pipeline.

Despite basically no public resistance by the EEC against the export restrictions, the US scrapped them in November 1982, only four months after it had imposed them. This announcement was combined with a new "East-West" policy on trade, declaring that from now on: (1) The transfer of strategic items to the USSR would be controlled more sharply, and (2) Procedures would be established to monitor financial relations with the Soviet Union, in order to harmonize the alliance's "export credit policies." (Hoffman, 2004).

International institutions

GATT didn't play a role in this conflict. No side took the international institution's rulings into account.

Key takeaways

The use of trade tools for non-economic and strategic purposes is not an invention of the last two decades, but was previously employed by US policy-makers in their fight against the Soviet Union. In this specific case, the USA did not have leverage over its direct opponent, the Soviet Union, due to very low trade dependencies between the two countries. The US thus tried to pressure its own allies into submission with its own foreign policy goals by applying export restrictions.

This was not effective due to a handful of reasons. First, The US did not weaponize its economic clout and Europe's dependency on the US as a major market for European exports. The US's few export restrictions for pipeline construction technology were not effective, as the EEC could substitute those goods from European companies.

This low US-American aggressiveness may be explained by the fact that the conflict between EEC-US took place within the most important security alliance of both sides. The US likely hesitated to adversely harm the economy of an important ally and thus refrained from more hurtful trade weaponization.

NATO as a negotiation platform and common value system also played an integral role in overcoming the conflict. Across the Atlantic, the US and the EEC had a strong incentive to overcome the trade war to remain focused on defense cooperation. In the end, a NATO agreement solved the conflict.

The US trade weaponization also was not effective, as the Europeans were very determined about their political objectives. This gave them a high economic pain threshold. The little pain inflicted by US sanctions did not make up for getting independent from Arab petrofuels and achieving closer relations with the USSR. The difference in interpretation of possible trade between the EEC and the USSR is stark: while the US mainly feared the potential dependency of the EEC, the EEC saw the potential lock-in of friendlier relations with the USSR.

Another reason besides their ineffectiveness to quickly scrap the sanctions was that US industry representatives pushed hard for being allowed to compete with European companies for contracts with the pipeline. This strongly influenced US decision-making, as oil and gas companies had large influence in the White House.

Meanwhile, GATT was not involved in solving the conflict. The Europeans could have brought the US's trade weaponization before the organization, but decided not to trust in the US following its rulings and did not feel enough economic pain through the US's export restrictions to genuinely consider the move.

Finally, it might be considered that one of the objectives of the US sanctions was to pressure the Europeans into a new "East-West Policy" on trade - beyond stopping the pipeline – and thus finally successful. But this amounts to speculation (Gwertzman, 1982).

Rare Earth 2010s

Summary

China had been the leading supplier of rare earth materials, necessary components for high-tech manufacturing industries, supplying nearly 95% of the world's demand by 2010. As such, countries like Japan had been dependent on the export of Chinese rare earth for hybrid car engines, cell-phone batteries, and satellite communication devices (Hurst 2010). However, the supply of Chinese rare earth was set to be impacted by Chinese domestic policies. The Chinese government determined the environmental cost too high compared to its benefits, prompting them to gradually reduce its production. This would increase the market price, preserve its environment and workers' health, and transfer the nation's manufacturing structure to high-tech industries by increasing investments (Armstrong 2013).

Within this context, a geopolitical issue arose in September 2010 that complicated the flow of rare earth due to tensions around the disputed territory of the Diaoyu/Senkaku islands in the East China Sea. As both China and Japan claimed sovereignty over these islands and its surrounding waters, tensions escalated when the Japanese Coast Guard apprehended a Chinese fishing boat near the islands. China viewed this as an encroachment on Chinese sovereignty, resulting in Chinese suspension of high-level contracts with Japan. Among its retaliatory actions was to weaponize the export of rare earth to leverage against Japan. Soon after the incident, rare earth import shipment to Japan had been delayed due to reshipment checks (Inoue 2010).

This action was not lost on Japan, as it reacted to the attack on its supply chain. Given its weaker position vis-à-vis China, Japan re-aligned its position by building rare earth supply chains outside of China, developing production mechanisms with greater efficiency on the use of rare earth, jointly filing a complaint with the EU and the US against China to the WTO, and ameliorating the diplomatic situation by releasing the Chinese fishermen. While Japan had released the fishermen, ultimately China did not get the apology or the resolution to the territorial dispute that it wanted. Thus, Japan, even as a dependent on rare earth, was able to undermine the stronger Chinese position through diversification and shifting its production capabilities. As a result, China once again returned to the status quo of its rare earth exports before the incident.

Actors

The relationship between China and Japan, the third and second largest economy in the world, is one that is complex and nuanced, especially as historical issues continue to serve as impediments to political and economic cooperation. In Asia, the memories of Japanese colonialism and modern attitudes towards its transgressions from the past remain very relevant to ongoing trade and political issues. This is no different when considering the territorial dispute of the Diaoyu/Senkaku Islands. China maintains its sovereignty over the islands, claiming ownership since the Qing Dynasty until it had been forcefully taken over by Japan during the imperialist period. Meanwhile, Japan claimed its possession of Senkakus with the support from modern international treaties, referring back to the 1895 Treaty of Shimonoseki and 1951 San Francisco Peace Treaty (Dan 2018). With this context, Japanese action that directly confronts this issue could not be ignored by China, as its inaction could be a negative signal, at worst acquiescing to Japan's colonial history and undermining Chinese pre-eminence and sovereignty.

In this light, more so than preserving the bilateral trade with Japan, China's priority revolved around resolving the incident around the Diaoyu Islands in order to not lose face with respect to the Japanese. This is particularly poignant given the recent ascension of President Xi Jinping whose "Chinese Dream" sought to re-establish Chinese pre-eminence in world affairs. Thus, the Chinese government prioritized the projection of a stronger China, proving not only its economic but also its political power, where it sought to strengthen nationalism as a tool to fortify the administration's hold on power.

Meanwhile, the Japanese economy has benefited from the increased demand for high-tech goods. Japan is a major producer and exporter of sintered rare earth magnets, nickel-metal hydride batteries, auto catalysts, digital cameras, and the largest global producer of hybrid electric vehicles

(Hurst 2011). As a necessary component to manufacture these goods, Japan has become increasingly dependent on the import of rare earth, which China has become a major exporter to the country, developing an unequal trading partnership vis-à-vis rare earth material.

Objectives

Although China had already taken steps to reduce the production of rare earth due to environmental and safety concerns, the incident around the Diaoyu Islands precipitated its actions in at least delaying the export of rare earth to Japan. For China, the priority was not on maintaining this trading relationship but on its external signaling against Japanese assertive behavior with regard to what it considered its sovereign territory. This was the approach of the Chinese government, due in part to the political structure of China, where the Communist Party as the sole party must encourage domestic support for its policies. Retaliating against Japanese actions that served to undermine China's position was one way to do this, helping to unite the public through nationalistic rhetoric and action to support the government.

During this incident, China sought to use its economic power to compel Japan to acquiesce to an apology, reparations, and the release of the captain. With the understanding of Japanese dependence on rare earth, China withheld shipments of this export during the dispute while awaiting these demands, as it had a clear upper hand in this particular resource, initiating a trade war.

Tools

Trade between Japan and China have been increasing over the past 45 years from \$1 billion to \$317 billion, China representing more than 20% of Japan's total trade and Japan becoming China's third largest trading partner (West 2020). Thus, the major tool used by China was export restriction of rare earths and delaying exports by thorough inspections. Under the WTO rules of fair trade, any official banning of exports is prohibited and would permit Japan to file a formal complaint with the WTO. However, China issued an administrative halt to shipments for three weeks, which simply prevented the loading of exports to Japan and is much harder to prove under WTO rules (Bradsher 2010). Later when Japan complained about the coincidence between the incident near the contested waters and shipment delays, Chinese officials denied its responsibility and instead blamed the overzealous Chinese suppliers as the cause (Jha, 2010).

To overcome the situation, the Japanese government decided to set aside 53.3 billion yen for the following measures to reduce dependence: 19.7 billion towards developing rare-earth minerals abroad, 1.6 billion towards recycling, urban mining and developing alternative technology by the government and the private sector, 16.3 billion towards developing offshore oil and gas in Japan, 8.9 billion towards a pre-feasibility study on methane hydrate deposits, and 6.8 billion towards a study on cobalt rich crust and other undersea reserves (METI 2011). Furthermore, Japan also diversified its supply chains by expanding their trade partners other than China. State efforts originated in the Japanese Ministry of Foreign Affairs (MOFA), the Ministry of Economy, Trade, and Industry (METI), and the Japan Oil, Gas, and Metals National Corporation (JOGMEC).

MOFA and JOGMEC focused on creating new supply chains, by increasing rare earth imports from Canada and the US. It also increased rare earth wastes from Vietnam, extracting rare earth from recycling the waste. METI devoted efforts into developing technologies that would reduce Japan's reliance on rare earths. For example, Toyota and Tesla Motors jointly developed an induction motor that did not rely on such elements. Hitachi Metals also developed a technology that could reduce the amount of dysprosium used in electric motor magnets without affecting performance (Shida 2019).

In addition, Japan filed a complaint against China to the WTO regarding the rare earths. Understanding the futility of a suit against China for delaying exports, Japan instead targeted China's overall control of rare earths. Thus, Japan jointly filed a complaint with the US and the EU. They argued that Chinese companies had been unfairly subsidized by the Chinese government as Chinese companies could buy rare earth for lower than market price while the other companies had to pay an increased price due to China's export quotas. This would result in a lower price for products given the cost advantage in raw materials.

International institutions

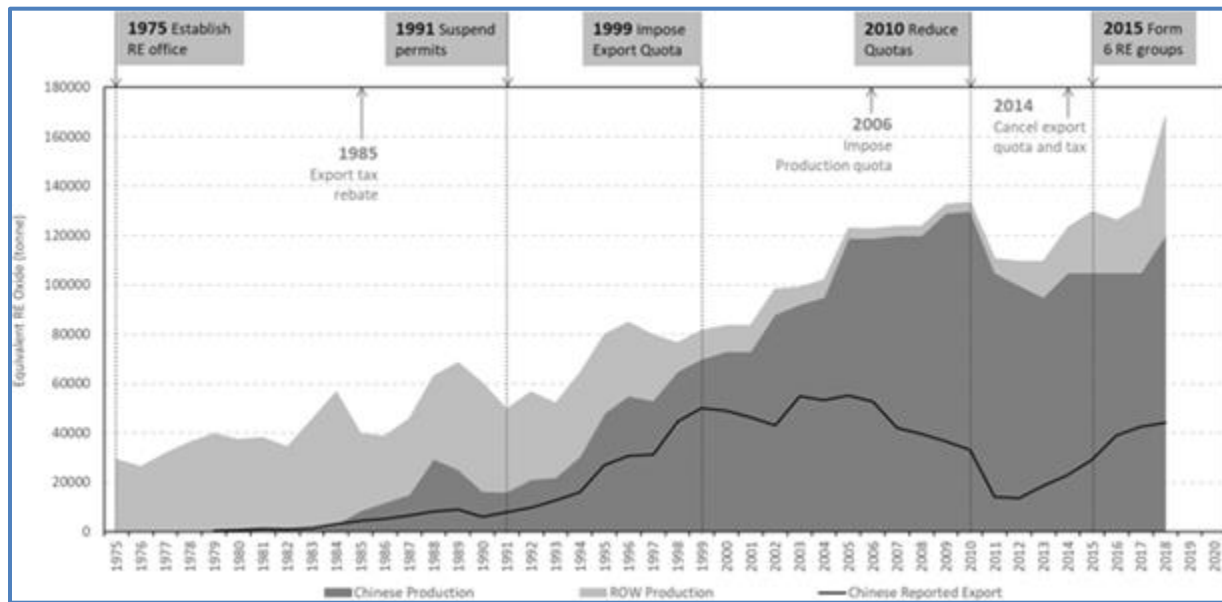


Figure 10

The US, Japan and the EU, protested China's improper conduct on restricting the production and international trade of rare earths. These countries were critically affected by Chinese restriction as their high-tech industries were dependent on imported rare earth. These countries sued China at the WTO and argued that, first, China's export taxes on rare earth products should be removed as primary rare earth materials were unlisted in the Protocol on the Accession of the People's Republic of China. Second, China was violating the WTO's terms and protocols by substantially restricting the export of rare earths. Third, China's regulation and allocation of the

export permit was also violating the promises made in WTO protocols. On the other hand, China claimed that its policies were justified by Article XX and Article XI of the GATT 1944, as the purpose was to protect nonrenewable resources, the environment, and human health. Nonetheless, China lost the WTO rare earth dispute case as the export restrictions did not meet the requirements of the exceptions in the Protocol.

Key takeaways

First, as a result of the WTO decision, China canceled its export quota and export tax on rare earth products in 2015 (Shen et al. 2020). Moreover, China could only accomplish parts of its objectives. China was successful in the release of the detained Chinese fishermen, but did not receive any apologies from Japan nor could they resolve the territorial dispute in its favor. Arguably, since the conflict involved high stake territorial issues, both sides were willing to endure a significant level of economic hardship in the dispute.

It is important to note that China had used its monopoly power to halt exports of their natural resources. In November 2009, the US, the European Union, and Mexico filed formal complaints with the WTO against China for limiting access to yellow phosphorus and eight other materials. (Blakely et al. 2012) China is increasingly using its highly valued natural resources to influence non-economic issues. There is a high chance that China will use its upper hand in natural resources as a weapon against other countries in the near future.

Japan learned a lesson that China possesses a powerful economic instrument to employ against nations that depend on Chinese resources to sustain their economic livelihood, and this lesson can also be applied to other countries in the future. As a result of this trade war, Japan reduced its dependence on Chinese rare earths to 55% in 2015, compared to the 86% in 2010 (Vekasi 2018). Although naturally, the country in the more powerful position would be expected to gain from the trade war, the country in the weaker position could undermine this position if it has the ability to shift the dependence through alternative sources, through changing production methods, or a combination of both. This is precisely what happened in this particular case as Chinese delay of exports led to Japan decreasing its dependence on Chinese exports as it sought alternative exporters (US, Canada, Vietnam, and Australia) and further developed efficiency in material processing.

4.3 Economically-motivated case studies

Pasta War 1980s

In 1975, the US imported approximately 54 million pounds of pasta, of which 10 million pounds were from Italy. By 1985, pasta imports had skyrocketed to 175 million pounds, of which 110 million were from Italy. Responding to this surge, the American Pasta Association filed a petition against the imports with the US Trade Representative in 1981. The petition argued that European pasta makers were unfairly advantaged compared to American producers, as the European Economic Community (EEC) gave pasta makers between a 5-12% subsidy per pound of pasta

exported. The Reagan Administration responded favorably, and in 1984 imposed import tariffs on European pasta. These tariffs aimed to punish the EEC for unfair pasta production practices, and for prior concerns regarding US citrus exports to Europe. Moreover, they protected domestic US noodle-makers, whose 2 billion pound pasta production was forecasted to be rapidly taken over by European imports (Time; Molotsky). When the Pasta War was resolved in 1986, the EEC agreed to reduce its export subsidies. The US in turn agreed to stop contesting the EEC's citrus trade practice (UPI; Raum).

The Pasta War emerged within the context of preexisting trade tensions between the U.S. and the EEC. Tariffs on European pasta imports intended to, in part, retaliate against Europe's treatment of US citrus exports. The EEC had imposed more favorable tariffs on lemons and oranges supplied from countries around the Mediterranean, including Morocco, Algeria, Tunisia, and more (Time; Molotsky). According to Willy De Clercq - the EEC's Commissioner for External Relations in Brussels - preferences on citrus imports aimed to contribute to the economic and political development of these Mediterranean countries, and did not benefit the EEC economically (Molotsky; UPI). Despite the stated aim of such practices, in 1985 the US imposed import tariffs on European pasta exports; tariffs were 40% on the value of imported eggless pasta and 25% of pasta varieties made with eggs (Time; Molotsky). The EEC accordingly unilaterally retaliated by imposing tariffs on American lemons and walnuts (Geyelin). Tariffs lasted for seven months until August 11, 1986, when the US and the EEC agreed to end the conflict. Both agreed to dismantle the trade restrictions on pasta, lemons, and walnuts introduced in November 1985 (UPI). The EEC agreed to reduce European pasta export subsidies by 27.5% (Raum). And the US conceded to no longer contesting the EEC's preferential deal with Mediterranean countries (UPI).

Three key takeaways from this conflict include (1) the employment of a trade weaponization as a domestic political tool, (2) when countries are economically balanced, achievement of all objectives is unlikely, and (3) the weakness of international institutions. Media coverage and commentary by US politicians seemingly escalated the rhetoric about a "trade war," evidencing the politicization of this term that continues today. In an interview with then Vice President George Bush, he said that he had "never seen Congress so up in arms' about foreign competition," despite the fact that the recent US trade history was full of similar trade conflicts (Geyelin). Moreover, the US did achieve its aim of reducing the EEC's export subsidies for pasta manufacturers. However, it accordingly agreed to no longer contest the EEC's preferential treatment of Mediterranean exports in the citrus industry. The US did not resoundingly "win," perhaps due to the fact that the aggressor and agresse were more balanced economically. As stated in the Analytic Framework, the effectiveness of trade weaponization is determined in part by asymmetric interdependence. The size and development of the US economy compared to that of the EEC were balanced, as was bilateral trade. Interdependence was accordingly symmetric, which can explain the ineffectiveness of weaponization in this case. Lastly, throughout the conflict the US continually disregarded GATT dispute settlement provisions, and both the US and EEC imposed tariffs without GATT approval, evidencing the weakness of international institutions (Zangl).

Still, the conflict did not escalate to a full-blown trade war or to a broader political conflict; instead, both parties limited tariff-hikes to a few commodities. According to our theoretical approach, this may be due to the aggressor's motivation for weaponization, which was narrow

sectoral economic concerns rather than broader geopolitical goals. Moreover, since the parties were close allies, an escalation of the conflict could have produced negative security externalities for both. Given said externalities and relatively low stakes, both sides were unwilling to start a full-blown trade war, despite the absence of strong multilateral trade institutions.

Textile Conflict 1980s

On January 1st, 1979, the US and China established full diplomatic relations. One side is the economic and political hegemony of the world, the other side is a developing country that just started to open up. Two governments moved to eliminate the remaining legislative and administrative hurdles to commercial relations (Sullivan, 376). In July 1979, the US and China signed the agreement on trade relations, establishing normal economic and trade relations. However, in the same year, the US unilaterally announced to restrict the quota growth rate on seven categories of textile that China exported to the US (Weidenbaum, 91). In 1983, they walked to the point of a bilateral trade conflict: because the US government expanded the restricted categories from seven to thirty-six in the textile imported from China, the Chinese government quickly reacted to reduce the imports of cotton, chemical fiber, and soybeans from the US by two-third, compared with the import amount in 1981 (Wang, 227). The trade dispute ended with an agreement that the US government allowed China's exporting growth rate to increase from 1.5 % to 3.5% each year covering 34 textile items.

The main purpose of the US is to protect its domestic textile industry. In China, the textile industry had been reformed and became the pillar industry after the Chinese economy opening up in 1978. The decline of the US textile industry offered a golden opportunity for Chinese textiles to enter the US market. From 1978 to 1982, Chinese textile exports to the US increased sevenfold (Shen, 58). The domestic American textile manufacturers suffered a huge loss and pressed the government to restrict Chinese textiles. Also, at that time, the relations between two countries was not very stable (Lukin, 1151), with political and economic frictions in various fields. Moreover, President Ronald Reagan was conservative and a protectionist that supported protecting the domestic textile industry by restricting external competitors.

Chinese textile had strong competitiveness worldwide because it had advantages over other low-cost producing countries: a highly skilled work force and its own production of natural and synthetic fibers (Hughes). At that time, such cost-effective and fast-growing textile factories were mainly available in China. For the US, the feasibility of transferring textiles imports from China to from other countries was limited. For China, textile exports grew rapidly to 18.7% and became the largest single export item in 1983; one of the main importers was the US. The overall capacity in China far exceeded its domestic demand which made seeking overseas markets inevitable. Chinese exporters even competed for the American market. Therefore, China would not compromise on the US's restriction and quickly unilaterally retaliated by reducing American agricultural imports. The opposition has grown louder in the US. China's retaliation put the US into a dilemma between the pressure from senators of textile states and the pressure from congressmen of farm states (Yan 26). Agricultural exports played a critical role during the 1970s-1980s farm boom and financial crisis in the US. Finally, in 1983, the US congressmen of farm states came to mediate the domestic interests dispute and promoted the US government signing a

5-year agreement that increased China's textile exporting growth level. China, therefore, withdrew the restriction on agricultural imports from the US.

The Reagan administration has failed to achieve its economic objectives. Agriculture was the dominant industry of the US economy and had power to pressure the government to offer a concession. Therefore, as our theoretical model would suggest, powerful vested interests can play a relevant role in the definition of the outcome of trade disputes, sometimes reinforcing the economic pressure imposed by the aggressor. Although it was quite weak in terms of GDP, China successfully seized on the weakness of the importance of agriculture to the US economy and quickly fought back, forcing the US government to compromise. It represents the asymmetric interdependence between the US and China, which the US agriculture is dependent on Chinese purchasing and Chinese textile is dependent on American purchasing. In this across-alliance case, both sides were hurt in varying degrees from this dispute. It is obvious to learn that when two countries are asymmetric interdependent, any restriction on one imported good will very soon affect another exported good. Protection of a selected industry is costly for the rest of the economy. Governors should normative consider the economy as a whole and then decide what trade policy and strategy to pursue.

Computer and Software 1980s

In 1985, on September 7, the Brazilian Independence Day, then US-president Ronald Reagan declared tariffs against Brazil's main exporting industries. His stated goal was to open up the Brazilian market to US computer and software producers, which had been allegedly banned from both selling and producing in Brazil by the Brazilian "IT Law" just one year earlier. The US tariffs mainly hit the strongest exporters of Brazil: producers of shoes, food, small airplanes and car engines. These sanctions caused Brazil to change parts of the IT Law. However, the US also scrapped its sanctions because Brazil's economy tanked. The US administration wanted to protect a "friendly" democratic country in Latin America (P. B. Evans, 1989).

The US in 1985 was a far stronger and economically more potent nation than Brazil (GDP p.c. in constant 2010 US\$ of \$32,132 in the US vs \$7,864 in Brazil, and the US having a population of 237.9 million vs. Brazil's population of 135.3 million). Yet, in the years from 1980-1985, the US global trade deficit had ballooned from \$16 billion to \$150 billion. The trade with Brazil had shifted from a minor surplus to a deficit of \$4.3 billion (US Census Bureau Foreign Trade, n.d.). The US now took off 26% of Brazil's exports (Bastos, 1994), the industries of which Brazil had protected and nurtured before. US lawmakers thus were on a mission to project strength to their voters, shrink the trade deficit and prevent the "leakage" of industries and capabilities to other countries, like with the semiconductor industry to Japan (P. B. Evans, 1989).

In light of its international trade deficit, US lawmakers thus pushed all around the globe for the opening up of markets they knew US producers had an advantage in (e.g. agricultural products in Europe, insurance services in South Korea, computers to Brazil) (P. B. Evans, 1989). This push was motivated by US domestic politics and in non-compliance with GATT regulations (Brazil actually had the right to nurture an infant industry, which was also deemed to be critical for national security), not supported by US Trans-National Companies (TNCs) like IBM who had

already found a way around the IT law (scrapping the Brazilian IT law would have led to only \$60 million additional computer exports) and didn't foresee the stark political outcry about "economic colonialism" it caused in Brazil (Bastos, 1994).

Meanwhile, Brazil was undergoing a change from military dictatorship to democracy in 1984/5, while also being hit by a worldwide economic crisis after the oil shocks in the 70s, in what is usually called the "Latin American Loss Decade". The Brazilian population saw itself as a developing nation, in desperate need of high-tech knowledge, such as computer technology, to catch up with advanced industrialized nations. Its computer industry was led by the governmental "Special Informatics Secretariat" (SEI), whose main goal was to preserve the industry (Bastos, 1994).

The sanctions against Brazil's main exporting industries did cause these industries to lobby against the IT law within Brazil, but only made some minor gains possible, such as protecting software under the IP law (P. B. Evans, 1989). However, besides the sanctions, other important changes took place in the Brazilian public political sphere: With the end of the military rule, disagreements about the IT policy within the government, the industry and between different ministries became apparent and could be voiced. The Ministry of Communications saw it as a barrier for the modernization of the telecommunications infrastructure and the Ministry of Finance worried about a fall in exports to the United States in the context of the Brazilian debt crisis, both undermining the SEI's tough stance on the law (Bastos, 1994).

When US computer TNCs also started to lobby in the US against the sanctions because they undermined their relationship with Brazilian partners and Brazil's economy began to falter in 1988, the US scrapped its tariffs. Protecting a conservative and democratic government in South America was deemed more important than domestic politics demanding tough action against the trade deficit (P. B. Evans, 1989).

This case study underlines two key findings from our theoretical background analysis: the roles of trade dependency and of determination for the outcome of a trade conflict. The US had the upper hand and large economic leverage over Brazil, as Brazilian exporters depended on the US market to sell their products. However, the effects of this dependency on the Brazilian negotiation position were severely limited by its strong determination to develop its own computer industry. This stance was supported both by the Brazilian public and the executive government. Only when the Brazilian political system liberalized and more opposing views were admitted – especially from the business sector and other ministries than the foreign and security ministry – did Brazil offer trade concessions. Trade weaponization is thus more likely to be successful if the targeted country's bureaucracy has to accommodate different policy preferences and is relatively open to demands of sectoral interests, as is more usual in a democracy.

The US's determination was largely bolstered by public opinion demanding a lower trade deficit. This call for tariffs could not withstand the opposing tide of the US computer industry's lobbying against the tariffs and the political interest of the US administration to support an ally by lowering the tariffs again (although Brazil is not a NATO member, it was back then an important regional ally). This case took place within an alliance, facilitating the timely end to the conflict. In

the end, the large US economic clout did thus not succeed completely in opening up the Brazilian market.

Banana War 1990s

The European banana market was the world's largest in the 1990s, where approximately 5.5 million tons of bananas were imported on a yearly basis, more than 70% of which came from Latin America and 17% from the African, Caribbean, and Pacific (ACP) countries (BBC News). Due to a European Union trade practice of giving preference to its former colonies in ACP, on July 1, 1993, a common banana trade regime (BTR) was introduced by the EU (Bustamante, 53). It differentiated among three types of banana imports, using a tariff rate quota system: ACP banana producing countries, non-ACP banana producing countries, and the third-party countries (Harris et al., 182). This regime allowed ACP countries duty-free access to the EU while restricting exports from non-ACP countries by imposing a duty. Since the US companies, Dole and Chiquita, owned a majority of banana farms in Latin America, they launched an aggressive and costly lobbying campaign in Washington and urged the US government to file eight separate complaints to the World Trade Organization (WTO) (Bucheli 2005). The EU agreed in 2009 to gradually reduce tariffs on bananas from Latin America, however, it was not until 2012 that the EU and ten Latin American countries had signed an agreement that formally concluded all the eight WTO cases, ending the 20-year longstanding trade war. What was interesting and ironic was that the US & the EU, the two loudest dissenters in this lawsuit marathon, were even not producers of bananas for mass trade.

Before 1993, countries in Europe pursued their individual trade regimes (Guyomard & Le Mouel, 150; Read, 260). The Single European Market established in 1992 made it possible to eliminate internal border restrictions that aimed at achieving the free flow of goods, people, capital and services, and a tariff rate regime that consisted of the solution finally adopted in 1993. The disputed issue on bananas was the consequence of the EU trade practice which gave preference to its former colonies. Subsequently, in the WTO Panel inquiry of regime legality, WTO condemned these preferences violating international trade rules on many occasions, and later even authorized the US and Ecuador to take retaliatory actions such as slapping tariffs on some EU exports. Besides, the WTO has also been working to enhance the protection of interests of developing countries, which was the reason why it supported the propositions of the US and the farms in Latin America.

In September 1997, the WTO ruled that the EU's banana import regime was inconsistent with WTO rules. After further consideration, the EU introduced a new banana import regime in January 1999. In April 1999, however, the WTO again ruled that this new regime was incompatible with the EU's WTO obligations. It was at this stage that the WTO authorized the US to impose sanctions up to \$191.4 million per year on EU products entering the U.S. market and granted Ecuador authorization to impose sanctions up to \$201.6 million per year on EU exports to Ecuador (WTO 2005). This case is merely 1 of 7 out of 315 cases that have reached the stage where the WTO has authorized retaliatory penalties.

In this case, the main problem of the WTO is its inability to enforce its rules. The WTO has ruled the EU's banana regime illegal twice, however, it was unable to make the EU submit to its decisions, simply because its rules on compliances were rather unclear.

It was a trade war within alliance and had comparable economic strength that the GDP was \$6.859 trillion in the US and was \$7.837 trillion in the EU. The economic symmetries between aggressor and agresse led the trade war to last 20 years to resolve. Chiquita and Dole were highly dependent on the EU market, but the EU had a good alternative source of imported bananas from ACP countries. Although the US was more vulnerable on the banana trade, it successfully used the WTO's regulation on political preferences to make a legitimate appeal. It is clear to see those big multinationals possess strong influences over the government in taking actions to solve a trade dispute so as to gain favors. Both the US and the EU are perfectly capable of fending for themselves in international trade. The US was involved mainly to satisfy Chiquita and Dole as well as avoiding troubles at its borders; while the EU was trying to protect the benefits of its old colonies and therefore maintain a sort of "Sphere of Influence" in those parts of the world. Both parties were making decisions based on their domestic interest groups, directly or indirectly. By studying this case, we can easily see how the international mechanism and organization interact with major powers in settling disputes. While multilateral arrangements designed to address conflicts among countries or blocs are already in place in order to prevent escalations, the influence of such mechanisms is still relatively limited, and the power of nation states still mighty.

Steel Tariffs 2000s

Even before 2002, there had been an overproduction of steel. Consequently, the glut of steel put downward pressure on the price of steel, decreasing dramatically, and had the potential to cause serious harm to the steel industry, which could not decrease production costs. The steel industry itself was largely unprofitable. However, governments continued to subsidize this industry in many countries given desires to prop national steel industries. For many countries, steel was essential to all domestic industries. Allowing them to shutter would increase trade vulnerabilities as these industries would now become dependent on foreign imports. Tangentially, as national steel industries were positioned firmly within many domestic supply chains, the loss of such industries would inevitably lead to a loss of jobs, increasing unemployment, and have the potential to affect other industries, leading to a domino effect in the national economy.

This was the experience of the US steel industry, whose problems were made even more acute by the increasing numbers of steel companies listing bankruptcy. In an effort to promote domestic production of steel from the oversupply for international steel, the US imposed tariffs on EU steel in March 2002. However, the tariffs were not able to bring about its intended goal, as the EU responded with a retaliatory tariff on US steel products and other goods and filed a complaint to the WTO over the issue.

In doing so, the US attempt to protect its national steel production backfired due to the EU's retaliatory tariffs, affecting a range of major US industries. In addition, the WTO's ruling in favor of the EU enabled additional EU tariffs on US goods. The US lost interest in its tariff policies and ultimately withdrew its tariffs in November 2003.

Ultimately, the US tariffs had failed and left the US states that President Bush intended to help in a worse position. The employment gains in factories that made raw steel were outweighed by job losses in other industries, especially in those companies that used raw steel into parts for cars and appliances. While the tariffs allowed for higher steel prices in the US, up to 200,000 jobs were lost in industries that used steel as an input component, leading to material shortages, production delays, and increased costs. The biggest job losses were in California (19,000) and Texas (16,000), but Rust Belt states like Ohio, Michigan, Illinois and Pennsylvania also suffered. 19% of the burden from increased prices was passed along to consumers and 32% of manufacturers, including automakers, reported production delays (Palmer 2018).

The US administration was concerned about its collapsing steel industries. Since the 2000 Presidential election, 21 US steel companies entered bankruptcy proceedings, including the two largest steel companies, Bethlehem Steel and LTV, which represented about half of the US steelmaking capacity and jobs (Hufbauer & Goodrich 2002). Protecting these industries had been a campaign promise of the Bush administration and the Republicans, allowing them to win over the steel industry and winning in a Democratic stronghold West Virginia after promising to look out for steelworkers' interests. Thus, the Bush administration felt the need to deliver on this campaign promise with strong government intervention.

On the other hand, the EU wanted the US to resolve the steel crisis without using trade barriers but to diagnose the foundation of the problem. Pascal Lamy, the trade commissioner of the European Union, stated that the EU was willing to reduce its steel capacity and output if the US refrained from imposing trade restraints and took parallel measures to reduce high-cost capacity. (European Commission 2002) However, as the US announced temporary tariffs on European steels, the EU decided to impose retaliatory tariffs on US steel and other goods.

For the US steel workers, 98% of the US steel consuming sectors employed less than 500 workers. (York 2018) Considering that the majority of the manufacturers were small businesses, the US steel industries were composed with price takers who had to accept the higher input costs caused by the tariffs, not with price influencers. The effect was apparent after the steel tariffs that nearly 200,000 jobs were lost in the steel consuming sector, which was larger than the loss of 187,500 jobs in the steel producing sector.

The temporary tariffs were imposed to prop up the US steel industry from foreign dumping. Although national security advisors worried that the tariffs would strain US-EU relations, the administration believed that further damage to those ties would be outweighed by the scope of the crisis in the steel industry. Thus, the Bush administration hoped to create breathing space for the steel industry to overhaul itself, and to force Europe to shut down excess production capacity, rather than directing the stress of the industry onto US steel plants, which would have to close as a result of diminishing profitability. The EU was willing to negotiate with the US on how to efficiently manage the overcapacity of steel products but the US initiatives to impose tariffs countered the EU's diplomatic efforts. Thus, the EU imposed retaliatory tariffs against US goods to first protect its steel industries and to terminate the US tariffs.

In an effort to protect the domestic steel industry, the US imposed temporary tariffs from 8% to 30% on a range of imported steel products. These tariffs affected products used by US steel-consuming manufacturers, including producers of fabricated metal, machinery, equipment, transportation equipment, and parts; chemical manufacturers; petroleum refiners and contractors; tire manufacturers; and nonresidential construction companies (Francois & Baughmen 2003).

In response to the US tariffs, the EU imposed retaliatory tariffs on US goods, especially on textiles, steel, and citrus products. The EU chose industries in politically important states, including Florida, Pennsylvania, West Virginia, and Wisconsin that would get the president's attention. In specifically targeting the goods from these states, the EU would undermine President Bush's popularity in these states, critical during the presidential election, to compel Bush to capitulate. Moreover, these were the states which would have benefitted from the US tariffs on imported steel, according to EU officials.

The EU also filed a complaint with the WTO and published a list of American products that it would threaten to tax up to 100%. In November 2003, the WTO ruled against the US steel tariffs, saying that they had not been imposed during a period of an import surge - steel imports had actually dropped a bit during 2001 and 2002 – and that the tariffs therefore were violation of America's WTO tariff-rate commitments.

The US-EU steel tariff case was filed by the EU with the WTO. The WTO ruling authorized more than \$2 billion in sanctions; the largest penalty ever imposed by the WTO against a member state. (Ackman 2003) Nonetheless, even after receiving the verdict, the US administration declared that it would keep the tariffs. In retaliation, the EU threatened to counter with tariffs of its own on products ranging from Florida oranges to cars produced in Michigan, with each tariff calculated to likewise hurt the President in a key electoral state. Therefore, in December 2003, the US backed down and President Bush withdrew the tariffs.

The benefit of using protectionist policies to save very few steel-making jobs in the short run had been significantly outweighed by the unintended consequences of higher prices and job losses in other industries. In making future policies to revitalize manufacturing, policy makers should also consider the effects across other industries. The lessons learned from 2002 should also be applied in President Trump's new tariffs on steel and aluminum products as the EU already planned to retaliate against Kentucky and Harley-Davidson motorcycles. (Long 2018) Similar to how the EU responded in the past, Kentucky is the home state of Senate Majority Leader Mitch McConnell, and Harley's main production factories are in Pennsylvania, Wisconsin and Missouri, key states that voted for Trump. Again, the EU is attacking the major industries of states which support the current US administration.

This case also illustrates that the presence of vocal interest groups can affect the outcome of trade wars. Although the United States, as a large rich country, could in principle endure the economic impact of \$2 billion in sanctions, the sectoral impact was politically untenable – especially since the conflict did not involve high-stake geopolitical goals. That corroborates the hypothesis presented in the theoretical framework that strong vested interest – the “commercial fifth-column” – in a weak state can be a source of vulnerability.

4.4 Summary and analysis

4.4.1 Why states weaponize trade

Among the key takeaways from our case studies is the fact that states weaponize trade for either geopolitical reasons (often motivated by foreign policy objectives of government officials) or economic reasons (often motivated by industry or consumer lobby groups, or by more narrow economic concerns). In order to understand the “willingness to suffer economic pain” and thus the determination of the country to win a trade conflict, it is important to understand the objectives at the core of escalating trade conflicts. As we have found, states with geopolitical objectives are more resilient towards economic pain, and a compromise is not always reached. Examples are the US not achieving its objectives in the gas pipeline conflict in 1982 and the US sustaining large economic losses throughout the Oil Embargo in 1973 while not giving in to the Gulf States’ demands.

Understanding states’ objectives is further relevant, as economic concessions by the aggressor might not solve the conflict if they are not combined with a simultaneous political compromise, in case the aggressor does not have economic, but political objectives in mind. Official statements might not always reveal the actual geopolitical motivations in a trade conflict. In the Banana War between the US and the EU, for example, official language was focused completely on unfair tariffs, whereas behind the scenes European countries wanted to keep their influence in former colonies.

Over the past decades, economic reasons for trade weaponization have been accompanied and often caused by the shift in economic balances between trading partners. Sometimes, they even break out due to announced policies that might possibly shift the trade balances. Such policies are called “beggar-thy-neighbor” policies. Propensity and intensity of such trade conflicts in the studied cases often were caused by the loudness with which impacted industries could voice their concerns to their states’ governments. Two main reasons for such a trade dispute can be identified:

1. Countries can resort to protectionism as a way to promote their infant industries, improve their terms of trade, secure the domestic supply of defense-sensitive goods (as in the case of BRA-US, 1985), or simply to benefit relevant domestic interest groups (as in the Chicken War between the EU and the US in 1962) These protectionist policies can trigger trade weaponization, when an economically stronger trade partner tries to break them up to open the market for its own producers, as happened in both mentioned cases.
2. Just opening up other markets is however not the only objective of countries with strong and dominant industries. In the analyzed cases of (US-JPN, 1980) and (US-CHN, 196), the US also feared that Japan’s and China’s new industries would put US companies out of business, and so it put economic pressures on those countries for force them to shift their export-promotion strategies. This economic objective often is borderline political and might even have a security component. Right now, the Corona pandemic shows that even textile industries may be relevant for a nation’s security: as in the production of personal protection equipment for the healthcare sector. Many other industries like refineries, steel, or computers more clearly fall into both security and economic categories. Moreover, it is

difficult to distinguish between the geostrategic component and a purely economic logic, when a dominant power uses trade weaponization to keep the technological and economical gap between itself and potential contenders to its hegemony.

Already before WWII, countries also engaged in trade conflicts to more purely pursue geopolitical goals, such as when the US restricted Japan's access to iron and oil in 1941 to deter its military expansion in Asia. However, the analyzed cases point to two developments concerning this objective over the past decades:

1. States started to deliberately use the dependency of others on their resources (consumers markets and strategic goods) for their political goals – and even started to purposefully build up such dependencies. The dependency of the world economy on fossil fuels became apparent when the Arab Gulf states caused a global economic crisis by restricting oil exports in the 1970s. This tactical usage of strong dependency on a specific good forced importing countries to adjust to the reality of the oil sector, causing a rapid international search for alternative sources of energy. It also found imitators in other industries: China deliberately created a monopoly in rare earths in the late 1990s and early 2000s, finally using Japan's dependency on Chinese exports of rare earths to pressure the Abe government over the nationality of the “Senkaku Islands”.
2. Another development was the surge in bloc tactics. The US had seen in 1941 that its export restrictions against Japan were only then fully successful, when it could convince the UK and the Netherlands to stop petroleum exports to Japan as well. While the US's trade weaponization in this case did not have the desired effect of curbing the Japanese empire's expansion, the US nevertheless saw the great effect its trade tools had on the other side's policy decisions. It thus began to use its economic clout to pressure its allied trading partners into a unitary and coherent aggressive political stance against the USSR during the Cold War, such as in (US-USSR, 1982).

It should be noted that all of the assessed cases by their very nature only represent trade conflicts and thus cannot inform the reader on the benefits of trade, which in theory outweigh its downsides. However, several of the cases show how parties to a trade conflict think differently about these perks of trade: either accepting the overall benefits of trade and bowing to the WTO's ruling (China-Japan, 2010), hosting domestic debates about whether the benefits of export restrictions outweigh the economic pain inflicted on oneself (US-USSR-EEC, 1982) or just blatantly ignoring trade benefits and forcing one's will on the other party as e.g. in (US-China, 1980s).

4.4.2 How states weaponize trade

Generally, States do not apply trade tools as a measure of first resort in a dispute with another country, especially if it is an intra-alliance conflict. Instead, aggressors will first reach out through diplomatic channels. The case studies instead confirm what has been explained in the theoretical background: trade measures are rather a “continuation of politics by different means” (Clausewitz). The US for example offered Germany several alternative energy sources before it

decided to block the pipeline from the USSR to Western Europe by applying export restrictions in 1982.

While allies might go somewhat easier on each other as in the US-USSR-EEC case of 1982, usually States try to hit the counterparty where it hurts them the most, both economically and politically, when conflicts escalate to the actual weaponization of trade. If the other side depends on a State's markets for their exports, the State will apply import restrictions. If they depend on their goods, States can curtail their own exports. China for example specifically targeted US farms in the 1979 textile trade conflict, while in another conflict, the US put tariffs on Brazil's shoe exports to the US to gain access to Brazil's electronics market. In both cases, politically strong interest groups were targeted as a way to enhance the effectiveness of the weaponization of trade. During and after a trade conflict, States will thus strive to lower their dependency on the other side, as did the West after the Arab oil embargo in 1973, or Japan after China had restricted its exports of rare earths in 2010. The cases also showed that aggresses reach out to their partners within alliances, to see whether they can substitute exports or imports, as Japan did in its 2010 conflict with China.

Finally, the past three decades have seen a surge in trade conflicts brought to the WTO, where the proportionality and legality of the tariffs were subsequently decided. Before, the mostly weaker aggresses had not bothered to call to the impotent GATT for help, such as in the "Pasta War" of the 1980s or in the case of BRA-US in 1985. WTO rulings on the other hand, often actually led to a solution of even geopolitically-motivated conflicts, as in the steel conflict of the US vs EU in 2002-2003, or in the case of CHN vs JPN in 2010.

4.4.3 How weaponization of trade concludes

As noted in the *Theoretical Framework*, key factors determining the outcome of a trade conflict are **asymmetric interdependence** (in line with the substitutability of the traded goods/consumers market), the **determination** of the parties to reach their political or economic goal, the **political relation** between the countries and also whether or not the **international institutions**, especially the **WTO**, can act as mediators.

As explained above, asymmetric interdependence is important since it gives states the power to inflict higher pain on an adversary through trade tools. Key questions to ask are: Can the traded good be replaced by another good? Can it be supplied from another country? Maybe even from within the country hit by the export restrictions? How important is it for value production within the targeted country? Vice versa, one can look at possible alternative export markets, if the off-taker country applies import restrictions.

A strong additional cause of pain is that countries sometimes take too long to adapt to changes in structural variables, allowing vulnerabilities to grow to untenable levels. For example, in the Oil Crisis of 1973, the policies of the United States to the oil industry and to the Middle East was no longer suitable to a scenario where it had lost its role of last resort supplier of energy and Gulf countries were going through rapid political transformation, with an increasing regional Soviet influence. Until there was a binding constraint, the United States did not adjust its course

of action to new reality, accepting a level of economic vulnerability that would be otherwise unthinkable. This type of policy lock-in is useful to explain deviations from the Realist approach.

The Oil Embargo also showcases that an asymmetric interdependence is not only defined by broad economic power measured by GDP and trade balances. Countries with key resources or goods, on which the economy of their trade partners disproportionately depends, have a large advantage in trade conflicts.

Meanwhile, if the broad economic power of both trading partners is on a comparable level, trade weaponization will reap less benefits, as shown in many of the analyzed EU-US trade conflicts over the past decades. While the US arguably had more economic clout than the EU, the EU's market was large enough to weather most of the US's trade tools' impacts and could hit back with force itself. Therefore, the aggressors in these cases mostly did not achieve their goals.

The fact that the US and the EU have been in a defense alliance since World War II also helps us to explain why the countries have never engaged in a full-blown trade war, even though they took part in several trade conflicts against each other. For both sides, inflicting heavy economic hardship to a close ally would have significant negative security externalities. This is why the conflicts mostly remained at lukewarm temperatures and did not spill-over to other dimensions of their bilateral relations.

This dependency needs to be heard and felt in the circles making foreign policy and trade decisions. This is why trade tools will be more successful if the targeted industry has a strong lobby in public opinion and/or among government decision-makers, acting as what Hirschman (1980) called a "commercial fifth-column". In the US-BRA case of 1985, US sanctions only began to show effects, when the Brazilian government turned from a military regime to a more democratic representation. It thus allowed for the impacted Brazilian exporting industries to voice their economic problems at government levels. Also, when China in retaliation to US tariffs on textile imports from China targeted the US agriculture industry, the far stronger lobbying power of the agricultural industry drove textile manufacturers' concerns out of the US congress. The US scrapped its textile tariffs to please the farmers.

This also applies vice-versa: A state deploying export restrictions will harm its own industry as well. If the harmed industry has a strong lobby, it might weaken the restrictions or cause them to end early, as happened in the US-USSR-EEC case in 1982. US construction companies fought the export restrictions for pipeline material, as they wanted to participate in building the EEC-USSR gas pipeline.

Therefore, as suggested in the theoretical framework, strong domestic interest groups also influence a country's determination when responding to trade weaponization, or formulated differently: how much economic pain a country is willing to tolerate in order to achieve its goal. In the end, this boils down to an analysis of domestic interest groups:

1. How strong is the voice of the industry harmed by the trade conflict within a country? Does the political system allow them to be represented? Does it have the organizational capabilities to make itself heard?

2. On the other hand: how important is the political or economic goal which is targeted by the tariffs? One again has to ask: which are the political interest groups? How strong is their voice?

In the US vs EU pipeline case of 1982, the US had a determined lobby pushing for geopolitically-motivated sanctions against the pipeline. This lobby group first out-maneuvered said US businesses who would have liked to participate in the pipeline's construction. On the other side in Europe, the political determination to build the pipeline was too large to be impacted by the US export restrictions.

Equally, the US would not have accepted the risk of a victory of Soviet-backed Egypt and Syria in the Yom Kippur war. It thus stood with Israel and sustained the economic damage of the oil embargo, in spite of its widespread harmful effects in the American economy. Therefore, when it comes to geopolitical objectives, the pain threshold seems to be higher and so countries are willing to endure more economic hardship.

Additionally, weaponization of trade develops differently whether the trade parties are within or across alliances. As suggested in our theoretical framework, trade weaponization against an ally (non-ally) brings about negative (positive) externalities. This is why the US often refrained from using all its economic clout over Europe in their various trade conflicts, while in the case of its trade war with Brazil in 1985, it lowered its pressure on the Brazilian economy as soon as it realized that it was harming a befriended government in a time of need. Intra-alliance conflicts also benefit from a plethora of negotiation platforms, first and foremost with GATT, but also through NATO, where the 1982 trade conflict between the EEC, the US and the USSR was solved.

In the last decades, WTO rulings were able to overcome international trade's structure of dependency and determination, as long as all sides adhered to its rulings. Examples from the analyzed cases are the steel conflict in 2002-2003 between the EU and US, as well as the rare earths trade war between China-Japan in 2010. In these cases, the WTO was not only able to solve an economically motivated trade dispute (steel case), but also a politically motivated case of weaponization of trade (rare earths).

However, as the WTO has no power to enforce its rulings - except by authorizing retaliation to its members, its impact depends entirely on the willingness of trade conflict parties to adhere to them. A willingness, which has come ever more in doubt. The US regularly undercut the organization's legitimacy, for example said steel conflict, when it did not adhere to its ruling to scrap tariffs on European steel for a while, until the EU actually implemented the retaliation measures the WTO had allowed it to use. Over the past years, the WTO also often needed several years to rule on a conflict, in theory making it possible for a stronger country to overpower a weaker trading partner before the WTO could condemn its behavior.

Therefore, although the multilateral trade regime is certainly not an epiphenomenon as suggested by a traditional Realist view, its effectiveness is fundamentally contingent to the sovereign decision of states to follow the rules. In the rare earth case of 2010, for example, China's political calculus came to the conclusion that not complying with the ruling of the panel would

harm its trade relations with all WTO members, which would revert in a significant reputational and economic loss. Indeed, in 2010 - less than ten years after its accession to the WTO - China was seeking to build the image of a responsible player in the international system, and so it accepted to give up in a diplomatic conflict whose actual stakes were rather symbolic. The WTO, hence, constrained the behavior of a member in a politically-motivated episode of trade weaponization. The fortunate circumstances of this event should make the reader cautious about overestimating the effectiveness of the multilateral trade system in limiting trade weaponization.

Lastly, it shall be noted that trade aggressors' goals are not always realistic. Sometimes, even sophisticated tariffs and import quotas can't overcome the structural advantage of a trading partner with an abundance of natural resources (oil, rare earths) or cheap labor. Weaponizing trade tools to achieve a policy change in the other state thus cannot have an effect, as these structural differences will not disappear. Similarly, and oblivious to economic facts, the US in its 1985 trade war with Brazil imposed tariffs on several billions' worth of imports, only to gain access to a computer market worth \$60 million.

5.0 The future of trade weaponization

5.1 Summary

With historical case studies, we will apply our analysis and insights into current trade conflicts and future ones, trying to answer the question: how current and future trade conflicts will develop and what role the WTO will play in those conflicts.

In historical case studies, we have observed how weaponization of trade evolved since World War II and how it was implemented among different variables, such as economic/political objectives, within/across alliances, and symmetric/asymmetric sizes. The theoretical framework well explained the outcomes of historical cases in terms of vulnerability, economic pain threshold, and the effectiveness of international institutions. However, whether current or future trade conflicts will fall within the framework remains to be assessed. Thus, an overview of weaponization of trade in current days will extend our analysis chronically and be helpful to provide reasonable projections.

The international trade today has changed enormously with the evolution of technology. Rapid technology development transformed the trade patterns, such as shifting the comparative advantages in traditional goods, but raised concerns over security at the same time (WTO, 2018). Meanwhile, the multilateral trade regime is losing its significance as increasingly more trading groups emerged, especially from developing countries. Moreover, the classic trade theory that international trade will benefit all has been challenged by disadvantaged domestic sectors. Therefore, the entangled economic and political dynamics behind each country's evaluation of today's trade relationships will shape international trade development in the future.

To understand current trajectories of trade weaponization, we chose two ongoing trade conflicts, the US-China case and the Japan-South Korea case. Utilizing the same analytical methods, we will study the two cases on four key axes, objectives, actors, trade tools, and the

involvement of international institutions. The US-China case was between two great powers, focusing on the economy and technology, but stemmed from the political objectives of restraining the development of a potential world leader. The Japan-South Korea case offers different insights from a trade conflict between two non-hegemonic countries with a political nature and historical grievances. Though different in background, the two cases both show intertwined economic and political objectives and a weakening international trade regime.

After analyzing both cases, we will compare key variables in the current two cases with historical case studies. In the meanwhile, we will assess whether our findings align with the theoretical framework. Based on this, our projections will cover the short-term development of current trade conflicts and a long-term perspective, including the role of international institutions.

5.2 Evolution of the trade system structure

This report covers a period of 79 years from the first United States-Japan dispute in 1941 to the ongoing trade disputes between the United States and China and between South Korea and Japan. Over that period, the international trade system changed dramatically, with the creation and evolution of the multilateral trade system first centered on GATT and then, after 1995, the WTO. In 1941, when the first of our case studies took place, countries were moving rapidly towards autarky. Following the Great Depression and the collapse of the Gold Standard, the United States resorted to protectionism by imposing the infamous Smoot-Hawley Tariff in 1930. Other major countries, such as the United Kingdom and Germany followed suit. In a span of eight years from 1929 to 1937, “the volume of world trade halved” (Rodrik, 2011). The 1930s saw the Realist interpretation of trade interdependence at its historical apex, with countries trying to avoid economic vulnerabilities by relying on military expansion rather than on peaceful trade relations, as described by Hirschman (1980). It was in this context that the United States tried to exert economic pressure against the Japanese militarism, eventually aggravating its militaristic impetus.

It was against this backdrop that Western countries established GATT in 1947. In the years that followed, at least until China’s accession to the WTO in 2001, the United States was the dominant economic power in the world. In 1948, its GDP accounted for 65% of the total world income (Barton, 2006). It managed to lead a wave of trade liberalization and of shared prosperity in the advanced industrialized world. Indeed, as Krasner (1976) would indicate, a system with a single hegemon tends to be conducive to the rise of an open trade system. Still, the system that was put in place in 1947 was rather limited in scope and membership, with most of the contracting parties being “developed, capitalist economies” (Barton, 2006). Indeed, from 1955 to 1973, most of the growth in global trade took place between North America and Western Europe (Ruggie, 1982), that is, within the Western alliance and among advanced industrialized countries. Our framework would suggest that trade weaponization in these conditions would be relatively rare and involve relatively-low-stakes, such as in the Chicken War in 1962.

In 1973, with the Oil Crisis and the collapse of the Bretton Woods system two important pillars of the American hegemony broke down. Moreover, the patterns of global trade started with the rise of labor-abundant newly-industrialized countries. Indeed, in the 1980s, the United States started a trade offensive against countries such as Japan and Brazil. In the 1990s, with the creation of the WTO, the trade system achieved a new level of complexity. The United States and its European allies seemed to believe that by promoting the accession of former communist countries and of China they would be able to generate interdependence networks that would ultimately create vulnerabilities that could be politically exploited. However, China, in particular, benefited very smartly - and probably in a way that had not been anticipated by the United States - from the economic relative gains, accelerating dramatically its catch up with the advanced Western countries. That is, from a clearly hegemonic intra-alliance trade system, we now seem to be moving towards a context of a bipolar (or multipolar) trade system encompassing countries from different security alliances and even different structures of domestic political economy.

Structurally speaking, the interest of the United States in supporting the system tends to fade, since it will now see it as conducive to the economic catch-up of potential challengers to its global hegemony. It is therefore not surprising that the United States is leading the WTO Appellate Body to a shut down and trying to bring its trade disputes to bilateral negotiations. China and other emerging economies still rely disproportionately on global trade for their economic development, and in this sense are vulnerable to trade weaponization. Small and mid-sized countries, in general, will tend to be willing to preserve the multilateral trade system, usually complying with WTO rulings, since they depend a lot on an open trade system and they cannot bear the cost of standing up against it. As China gets closer to the United States in terms of economic development, it will arguably seek to reduce its vulnerability - as the balance between economic gains and political vulnerability will at some point shift. In other words, we project that China will eventually change its economic model in order to rely less on exports to advanced economies and more on its own domestic markets and some smaller countries, some of them now in the American and European spheres of influence, in a potentially politically sensitive process. The weaponization of trade by the United States is likely to accelerate this process, which can take several years to unfold given the level of economic interdependence.

5.3 Present-day case studies

China vs. US

Summary

In recent years, China began pursuing its new “Belt and Road” Initiative, continuing expanding its foreign economic relations/markets. There have been concerns in the US regarding the high trade deficit with China, which was believed as the result of China’s “unfair trade practices” (Kwan 2020, 58), and the increasing importance of China in the international system, which may weaken the US hegemony. Beginning in 2018, President Trump imposed tariffs on imports from China. China quickly retaliated by raising tariffs on imports from the US. In addition to tariffs, the US restricted the technology transfer to China as the US policymakers worried about China’s widespread cyber economic espionage against US firms (Morrison 2018). The US

established laws against the transfer of technologies to other countries and banned the direct investment of Chinese firms. During the trade war, both parties actively searched for negotiations to reach an agreement. A temporary truce was agreed in 2020 when China and the US signed the US–China Phase One trade deal.

Actors

Since the start of the rapprochement of the United States with China, started in 1972, the US had cooperated with China in economic development for several decades. Since Nixon administration, the State Department and the Defense Department had espoused the idea that the engagement of China into the world economy and multilateral institutions would turn it into a “responsible stakeholder,” a player that would contribute to rather than challenge the political and economic status quo (Etzioni 2011, 1101). In 1995, the United States became an enthusiastic supporter of China’s accession to the WTO (Tooze, 2018), which eventually took place in 2001. From 2000 to 2009, China’s trade surplus with the United States surged from \$83 billion to \$227 billion (Blustein, 2019). The situation generated growing concerns in the American political establishment. Barack Obama, for example, warned in 2006 for the risks of high deficit and reliance of foreign creditors (Tooze, 2018). Once the United States got into the Great Recession, it became more apparent that China was not going to adopt a Western capitalist model any time soon, which changed the US’s approach to China’s rise. Under Obama’s administration, the US government started to put in place restrictions to imports from China, approving 35% tariffs on imported Chinese automobiles and light-truck tires.

However, the Trump administration went further and shifted the America China policy to decoupling, aiming to prevent China from threatening US leadership in the world by constraining China’s behavior and economic growth (Kwan 2020, 60). While in 2017, the US-China relationship had a significant improvement during the meeting at Trump’s Mara-Lago estate in Florida as both countries were ready to tackle disputed aspects constructively (Larres 2020, 109). Late in 2017, President Trump visited Asia and believed that he achieved three goals: “to unite the world against the nuclear menace posed by the North Korean regime”, “to strengthen America’s alliances and economic partnerships in a free and open Indo-Pacific”, and “fair and reciprocal trade” (The White House 2017). However, President Trump’s attempt failed as China was pursuing its own trade alliance, The Regional Comprehensive Economic Partnership (Ono and Yasoshima 2017). Thus, the Trump administration started penalizing China for its robust trade practices (Larres 2020, 118).

Taking into account the historical bilateral relationship, we can classify the trade war between the US and China as across alliances. Even though the two countries opened to each other in trade, they were never political-military alliances. Additionally, there are vast differences between the two countries’ political regimes, making it harder for the two countries to achieve comprehensive cooperation. For the US, trade weaponization has positive security externalities, meaning that by inflicting economic hardship to China, the US is also constraining the economic and hence potentially military power of China. Therefore, the conflicts between the USA and China arose not only within the economy but also policies, such as political systems and foreign policies (the Belt and Road Initiative). Moreover, according to a speech by Vice President Pence

in 2018, the US is ready to confront China not only on the economic front but also by reinforcing the military and strengthening cooperation with Indo-Pacific nations that share values with the USA (Pence 2018).

When the trade war broke out, the US had the upper-hand, while China has already become the world's second largest economy. Their basic economic index before the conflict are shown below:

	Aggressor (US)	Aggresse (China)
Population (million)	325	1,421
Real GDP (million USD)	\$19,485,394	\$12,237,700
Territory (square kilometers)	9,833,520	9,600,000
Trade-to-GDP ratio	27.09%	38.15%
Intra-industry trade index	20.0% (from China)	8.0% (from the US)

China is still a developing country with only \$9770.85 GDP per capita compared with the US \$62794.59. However, it is not a particularly small economy, the national GDP in total is the second of the world. In fact, in purchasing power parity terms, it is the world's largest economy and will surpass the US economy at market exchange rates within the next decade (Summer 2019). In terms of trade, both countries are highly dependent on bilateral trade. According to the office of the US trade representative, in 2018, U.S. goods and services trade with China totaled an estimated \$737.1 billion; exports were \$179.3 billion; imports were \$557.9 billion; the U.S. goods and services trade deficit with China was \$378.6 billion. China is currently the US largest goods trading partner. While the US is experiencing the current account deficit, China tries to expand current account surplus through trade which increases its dollar reserve.

For China, before the trade war, it was already facing challenges of transition from its current high dependence on cheap manufacturing to the production of higher value-added goods. The competition of the manufacturing industry is intensifying as more and more American companies seek Southeast Asian countries, other than China, as their outsourcing factories. Also, the slowdown of economic growth added pressure on China. What makes China more difficult is that while it has been opening up and attracting US investments to set up factories in China, more and more companies are trying to leave China since the trade war due to the much higher costs. In a recent survey of 200 corporate executives that have business in China, 42% of them expect to purchase materials from other countries, and 25% indicate that they are redirecting investments out of China (Rampulla 2020). Therefore, in the very long run, China exports are at the risk of being replaced eventually by the exports of Southeast Asian countries. Although keep in mind that each of Southeast Asian countries, such as Vietnam, is a far smaller country, so it would probably take multiple countries to fully replace China.

For the US, more costs are passed on to US businesses and consumers since Chinese companies bear the growing tariff payments. According to J.P. Morgan, the rise of tariffs will cost the average American household an additional \$1,000 per year (Fitzgerald 2019). And the US agricultural industry has slowed down immensely since the beginning of the Trade War. According to the U.S. International Trade Administration, the U.S. agricultural exports to China decreased by 63% from \$15.8 billion to \$5.9 billion from 2017 to 2018. The farm states were devastated with a decrease of 82.5% in Louisiana and of 57.2% in Washington (Chinn and Plumley 2020). To keep the businesses stable, the Trump administration has offered billions of dollars subsidies to those farms that were hurt by its trade policies. But it also generates a political cost that the fiscal conservative supporters are unwilling to accept and believe it is not a long-term plan. Although the US keeps its economy strong, with job growth and GDP growth, China has another strategic advantage that could turn the current situation around—waiting for Trump’s presidency to over (Hankla 2019). But it should be noted that when the US hegemony is challenged, the containment to China perhaps becomes a bipartisan consensus, no matter what tools to use.

While the U.S. has economic and corporate clout against China, China has large chips of its own (Curran 2019). In terms of specific products that would be influenced, for the US, electronic products, agriculture products, and the industry that needs rare earth are the most vulnerable segments; and for China, the wood and cork products industry, electronic products, mainly Huawei and Hikvision, and steel industry are most influenced by the higher tariff and sanctions (Erken, Giesbergen, and Nauta 2019). It is almost inevitable that China is and will continue to shift its exports and switch the markets from the US to Europe, Asia, and its own huge domestic market.

Objectives

The trade war between the US and China originated from the US growing concerns about China’s rise. There are hot debates on whether a rising China will seek to change the rules of the liberal world order and challenge the US as the hegemon (De Graaff and Apeldoorn 2018, 113). The hardliners in the US view China as an existential threat to US security and interests (Sachs 2019). President Trump did not hesitate to attack China and accused China of raping the USA by persuading US companies to transfer factories and thus jobs to China (Diamond 2016). Professor Jeffrey Sachs of Columbia University, for example, writes: “The Trump administration’s conflict with China has little to do with US external imbalances, closed Chinese markets, or even China’s alleged theft of intellectual property. It has everything to do with containing China by limiting its access to foreign markets, advanced technologies, global banking services, and perhaps even US universities” (Sachs, 2018). Taking action against China’s growing economic and political influences, maybe Trump’s attempt to reassert the US’s leadership role in international affairs and to “make America great again.” (Mantzopoulos, S.J. 2019, 106).

The major battlefields of this trade war are economy and technology. The US experienced a bilateral trade deficit with China since the early 1980s, which jumped to \$419.2 billion in 2018 (US Department of Commerce). By the end of 2018, China held \$1.17 trillion worth of US Treasury bills and bonds (US Department of the Treasury). The statistics show that China could have a significant impact on the US economy. Current account imbalances can play an essential

economic role, but when they become excessive, they carry risks, including the risk of generating trade disputes (Obstfeld 2018). In the US, the imbalance of trade has caused slower growth and rising public debt (Dave 2019, 21). Therefore, decreasing the trade deficit was one purpose to realize for the US in this trade war.

On the other hand, the US administrations had continually complained that China violated intellectual properties (IP). Thus, section 301 of the Trade Act of 1974 became a weapon in this trade war (Mantzopoulos, S.J. 2019, 108). In 2017, the United States Trade Representative (USTR) conducted investigations into China's policies and practices under Section 301 of the Trade Act. The report was mainly focused on technology transfer, rather than on the trade imbalance. The report mainly stated the points that China pressured technology transfer from the US, supported theft from the US networks, and restricted US investment via technology licensing (Office of the United States Trade Representative, 2018a, 2018b). In light of the results from the report, the US officially involved the technology sector into the trade war.

Even though in the US-China trade war, the US utilized trade tools against China in the name of reducing the trade deficit and protecting national security to force China to change its economic model, the analysis indicated that the US was weaponizing trade to realize its political objectives of slowing down China's development both economically and politically.

Tools

The primary tool implemented in the trade war is the tariff. In 2018, three rounds of additional tariffs had been implemented on each other by both sides. The total US tariffs applied to China amounted to \$250 billion, with a tariff rate of 25% for the first two rounds totaling \$50 billion, and 10% for the third round amounting to \$200 billion. The total Chinese tariffs applied to the USA amounted to \$110 billion, with a tariff rate of 25% for the first two rounds totaling \$50 billion, and 5% or 10% for the third round amounting to \$60 billion (Kwan 2020, 62). In 2019, the US hiked tariff rate imposed on the \$200 billion of Chinese goods covered by the third round, and China retaliated by raising tariff rates as well.

In addition, to curb the technology transfer from the US to China, the US established laws and banned Chinese firms from the US market. President Trump signed the National Defense Authorization Act (NDAA) in 2018, which contains the Foreign Investment Risk Review Modernization Act (FIRRMA), providing countermeasures against the transfer of critical US technologies to other countries. Although the laws did not specify any countries, it is widely believed that these new laws are "tailor-made" for China (Kwan 2020, 64).

The US has publicly treated Huawei as a threat to national security since 2012, claiming that the Chinese government will use Huawei's access to the US communication network as an espionage platform (Morell and Kris 2018). The US government has taken a series of steps to block Huawei from US markets. However, the US ban also hurt Huawei's suppliers, many of which are US companies. In 2018, Huawei spent \$70 billion on component procurement, within which \$11 billion went to US firms (Jiang and Martina 2019). Considering the significant negative impact, President Trump promised to remove some restrictions on Huawei in 2019.

The increasing protectionism in the US expanded to education. Chinese scientists' visas were being delayed. Visas for Chinese graduate students studying topics such as robotics or advanced manufacturing were shortened to one year from five. Workers at technology companies were charged with stealing trade secrets. To retaliate, China geared up to use its dominance of rare earth to hit back (Rogers, Stringer and Ritchie 2019). In 2019, China also announced that it would establish its own "list of unreliable entities" (Kwan 2019).

However, the trade war harmed both economies. In the US, producer and consumer losses are estimated at \$68.8 billion (0.37% of GDP). After including tariff revenues, it was found that the trade war in the short run reduced US welfare by \$78.0 billion (Fatma and Bharti 2019, 270). Therefore, both parties made efforts to end the trade war through negotiations. In the meeting in December 2018, the US agreed to give China a 90-day reprieve from additional import tariffs. On January 18, 2019, China announced that it would take steps to reduce the US trade deficits with China. In February, President Trump announced that he would extend the March 1 trade deal truce deadline. However, the short-term peace ended in May 2019 when President Trump announced a plan to hike the tariff rate. After that, they still had several rounds of negotiations trying to solve the issue. Finally, in January 2020, China and the US signed the US-China Phase One trade deal, and a truce was reached.

International institutions

China joined WTO in 2001, and that helped China to grow even faster afterward. Until 2018, WTO dealt with over 20 cases between the US and China, such as export duties and quotas, subsidies, and restrictions on market access to service sectors (Schott and Jung 2019). Even though the Trump administration contended that the WTO has failed to protect its interests and also not allowed the US to protect its own interests (Fatma and Bharti 2019, 273), the results showed that the US won most of the cases (Schott and Jung 2019).

However, WTO did not help with the dispute settlement in the current US-China trade war. The tariff imposed by the US on China was based on Section 301 of the Trade Act, which allowed the USTR to fight against foreign country's unfair trade activities. The unilateral tariff raised by the US undermined WTO. The retaliation measures by China and the US's counter-retaliation measures were all not justified. Dr. Hufbauer answered in an interview that "there have been no findings by the WTO that China's actions as discriminating or unjustified or unreasonable. So, until the US actually makes that case in the WTO, there is no basis for it to impose the tariffs. Likewise, there is no basis for China to impose its tariffs." (Japan SPOTLIGHT 2018, 23).

Although both China and the US initiated dispute settlement procedures or filed complaints with WTO, they did not wait for WTO's decision before they took protectionist acts (Adekola 2019, 3). Even the achievement of the US-China Phase One agreement did not rely on an arbitration through WTO, but was reached through diplomacy. The neglect of the dispute settlement system of the WTO by both parties raises questions of the WTO framework to settle disputes among WTO members (Jones 2018) since WTO members relied more on themselves without recourse to the rules and procedures of the WTO (Adekola 2019, 9).

The WTO is losing significance in this trade war as it was difficult to solve the dispute. The dispute settlement system works in a complicated way and is influenced by the affected parties. In the US-China case, it was hard from the beginning to find panelists for consultation since both the US and China may object to the panelists, let alone how to ensure sufficient appellate body members to deal with the appeal (Japan SPOTLIGHT 2018, 23). Since the Obama administration, the US government criticized the cross-subsidies among state-owned banks and enterprises. However, the appellate body in the WTO argued against this statement as the US did not have strong evidence (Blustein, 2019). Thus, the US began blocking the appointment of judges to the appellate body to protest, and in December 2019, only one judge left in the office. Without at least three judges to open new cases, the multilateral trade regime faced raising concerns of its continuity. Moreover, the US took national security exception under Article XXI of GATT. Whether the WTO would actually look at the substance of the US's claim was in question, which left the impression that each member country is the final authority to decide if their actions were for national security (Dave 2019, 30). The loophole in the WTO investigation process leaves countries chances to weaponize trade against any other countries in the name of national security.

The global trade nowadays is moving to digital while the rules of WTO stays twenty years ago. The weaponization of trade became easier. Therefore, the improvement of WTO's rule-making and dispute settlement system is essential to WTO's long-term development. According to both Krasner and the hegemonic stability theory, a hegemonic system is more likely to lead to a free trade regime, and thus we saw the rise of GATT and WTO under the leadership of the US. However, with the increasing significance of China in the world, the US hegemony was challenged and might not foster a liberal trade regime anymore. Thus, we can observe the ineffectiveness of WTO in the US-China case. In addition, in the game theory perspective, the US-China case is like the prisoner's dilemma, where both countries could obtain a higher payoff by cooperating and embracing a free trade regime, while the only Nash equilibrium is that both countries would defect and choose protectionism. If the two big economic entities lean further away from free trade, whether the international free trade regime would sustain is the question that needs more study.

Key takeaways

Even though the US-China Phase One trade deal was signed, it was not the end of the trade war. Our projections will be mostly based on the analysis of historical case studies and key variables from the framework so as to assess a potential development of the US-China trade war in the short term and how weaponizing trade would evolve in the long term.

The conflict was focused on the economy and technology, where the US imposed tariffs to force China to reduce the trade surplus with the US and change its economic model, and established laws to restrict China's investment in US's technology. However, according to the realist view, a country's key objective is to maximize its security. Indeed, the US initiated protectionist acts under Section 301 of the Trade Act with the reason of national security, considering the successful experience in the 1980s against Japan. With the rising position of China in the international society, it is believed that the US's purpose of the trade war was to slow down the development of China as China threatened the US hegemony (Sachs, 2018).

When the US hegemony is challenged, the containment to China perhaps becomes a bipartisan consensus, no matter which party comes to power and what tools to use. Therefore, the US initiating the trade war, between the top two economies in the world, seems inevitable. Considering the US initiated the trade war and the Phase One trade deal was tilted towards US favor, the US has the “upper hand” and successfully grasps the high dependence of China’s economy on exports to the US (In 2017, China's exports to the US account for 18.7% of its total exports; U.S. exports to China account for 7.2% of overall U.S. exports; the US is China's second largest trading partner). However, as the results of the historical cases (e.g. textile trade conflict) implies, winning in one industry means losing in another.

In the very long run, on the one hand, Chinese exports are at the risk of being replaced eventually by the exports of Southeast Asian countries. Keeping in mind that each of Southeast Asian countries, such as Vietnam, is a far smaller country, so the US would probably take multiple countries to fully replace the exports that come from China. On the other hand, it is almost inevitable that China is and will continue to shift its exports and switch the markets from the US to Europe, Asia, and its own huge domestic market, in order to reduce the loss from the trade war and open up potential markets elsewhere. If the US cannot find other comparable manufacturing exporting countries and trade at a low tariff level, the US citizens will bear higher product prices. Improving the vulnerability problem is a matter of time.

Align with the hegemonic stability theory, the decline of the US hegemony resulted in the weakening of the multilateral trade regime. With a weakening international trade regime, it is easier to weaponize trade in a “legitimate” way. However, no one wants to be the one initiating a conflict with the risks of losing reputation. In the US-China case, the US successfully implemented its trade act against China for its national security, while this reason was only justified by the US, not the WTO. This fact could lead to the situation that aggressors in future trade conflicts will find rules or articles to prove that they are the victims, and they have to protect themselves. As discussed in the framework, the diversity of interests among WTO members is increasing while the WTO rules could not recast its rules to adapt to those changes. The result would be that the WTO members are not willing to participate in the WTO regime. Without the constraining power of WTO, every country can find some ways to legitimize their protectionism actions. Weaponizing trade will become increasingly easier in the future.

In terms of the major “actors” in future trade conflicts, the US and China may be the center with the US as the aggressor and China as the aggresse. For the US, it feels the threats not only from China but also from the EU. Economically, the US was upset about the \$101 billion trade deficit against the EU, especially Germany, which accounted for 60% of the total deficit and cooperated with Russia on the pipeline construction, reducing the US revenue. Politically, the US officially supported Brexit with the intention of dividing the EU (Larres 2020, 4-22). Besides the EU, more developing countries are emerging and taking more power in the world. The US hegemony will be challenged more frequently in the future and lean more towards protectionism, according to Krasner and the hegemonic stability theory. Thus, it is possible that the US may continue to weaponize trade in the future to consolidate its hegemonic position. For China, many countries have trade deficits with China. With the case of the US, it is possible that other countries will attempt to challenge China with trade. In the meanwhile, China is pursuing its own trade

partnership, which is in line with Krasner that a multipolar world would be split into different spheres, each with one great power and its subject countries. Whether the trade partnership centered with China be accepted by the US-led countries stays in question, and hence China could become the aggressor in future trade conflicts.

Additionally, technology could become the primary topic in future trade conflicts as the rules on digital trade are insufficient. In historical cases, we have seen several trade conflicts originate from technology: chicken war (EEC's lag of agricultural technology) and US-Brazil in the 1980s (computer and software). In a most recent case, Japan-South Korea, Japan imposed trade control against South Korea with concerns over information leaking. The increase of trade for goods and services has slowed down while the digital trade is growing fast and estimated to affect up to 70% of all global trade (Ketels, Bhattacharya, and Satar, 2019). However, WTO's rules are still at where they were 20 years ago, so no rules are covering the new form of trade. A potential long-term projection is that even though the WTO is now having an influence when a trade conflict is centered on purely economic objectives, the WTO could lose almost all of its constraining power in the international trade regardless of the objectives if it failed to adjust its rules to the trade development.

Japan vs. South Korea

Summary

The conflict initiated in July 2019, when Japan announced its decision to impose export controls on three chemicals (fluorinated polyimide, photoresists, hydrogen fluoride) indispensable for the key South Korean computer chips industry. Japan cited the leak of sensitive information from South Korea to North Korea as their reason for imposing the trade controls. However, South Korea deemed the move economic retaliation for the South Korean Supreme Court decision in October 2018 ordering two Japanese steel companies to offer reparations for Koreans who worked in their factories during Japan's occupation of the Korean peninsula during WWII. The conflict further escalated in August 2019, with Japan's removal of South Korea from its "white list" of countries eligible for fast-track exports, which was followed by an announcement from South Korea that it would be terminating its military intelligence-sharing pact with Japan and also bringing the case to the WTO. In addition, the Korean public has been effectively boycotting Japanese products like cars and alcoholic beverages in response to the conflict's escalation. Simultaneously, there is increasing usage of, and media rhetoric surrounding, the question of Japan's trade weaponization against South Korea (Farrell & Newman, 2019; Mulgan, 2019; Suzuki, 2019).

Actors

The conflict stands in line of a long historic feud over Japanese reparations to Korea after WWII. After the war, it took the two countries 20 years to reestablish diplomatic relations and Japan only agreed to pay compensation to Korean "comfort women" as late as in 2015 (and subsequently scrapped this agreement due to the current conflict).

The fact that both countries are key US allies in the region, and face shared hostility from North Korea as well as a vast trade dependency on China has not prevented them from engaging in this mutually harmful trade war. Both sides face strong constituencies who can make their voice heard in the democratic governments of the two adversaries.

Japan also has quite some economic leverage over Korea, disposing of two and a half times its population and a 20% higher GDP per capita. Korea also receives 11% of its imports from Japan, whereas the share of Japan's imports which is Korean is only 4.3%. Meanwhile, 7% of Japan's exports go to Korea, and 5.2% of Korea's exports to Japan. South Korea is also more vulnerable to trade restrictions than Japan is, considering the general makeup of its economy. In 2018, South Korea's trade as percent of GDP was 83, while Japan's trade as percent of GDP for the same year was 37, less than half of South Korea's (see: graph 1).

However, Japan also has "much to lose" economically by escalating this dispute: in addition to directly reducing Japanese market share for the production and export of chemicals as Korean companies look to alternative suppliers, because some of the Japanese suppliers produce these materials from factories in places like Taiwan, Singapore, and Korea, the trade conflict could negatively affect Japanese makers of manufacturing equipment due to lower demand overall from Korean customers in the long-run (Jang, 2019).

2018 data	Aggressor (Japan)	Aggresse (Korea)
Population (million)	126,529,100	51,606,633
Real GDP (millions USD) (constant 2010 USD)	6,189,778.13	1,381,859.69
GDP per capita	39, 290	31,362
Territory (square kilometers)	378,000	100,363
Trade-to-GDP ratio	37%	83%

Objectives

Though Japan was the first to initiate the trade conflict by imposing export controls over chemicals to South Korea, the conflict's tension points drive further back, to the Korean Supreme Court decision's ruling that Japanese steel companies are to be held responsible for providing post-war reparations. If so willing, the conflict's roots can be traced even further back to the underlying historical grievances between the two countries with regards to the Japanese occupation of the Korean peninsula between 1910 and 1945.

Japan's primary objectives for initiating the conflict seem to be both political, as well as economic. The supreme court ruling, which itself would only have cost Japanese companies \$340,000, opened up the possibility of further Korean claims against Japanese companies worth

\$20 billion (Matsuro & Kim, 2019). However, the Japanese stance also has a strong political side to it, judging by both Japan's publicly stated aim of arms control against North Korea, and the trade weaponization's widely regarded aim as retaliation against the illegitimacy of the South Korean Supreme Court's ruling. In the case of the latter in particular, Japan had been calling for arbitration under the terms of the 1965 Treaty of Basic Relations between Japan and ROK, but South Korea's refusal to appoint an arbitrator left no other obvious path to reaching a settlement.

South Korea's retaliatory actions have tended towards diplomatic and military means, rather than through a mode of direct trade weaponization. Korean objectives in this case are motivated by both economic and political considerations: because the materials that Japan has imposed export controls over target such a critical industry, and the potential losses Korea's economy will sustain are much greater due to the relatively low substitutability of the goods in question, economic motivations play a major driving role in Korea's objective functions. However, its political considerations also play a considerable role. As mentioned in our theoretical framework, countries may be willing to endure a higher pain threshold for existential or security-motivated conflicts. Thus, if it were not for the underlying historical grievances and political nature of the dispute, it is possible that the conflict would already have met a resolution since Japan has inflicted sizable economic damage to the Korean side and Korea may have been more willing to negotiate a conclusion to the conflict.

Tools

Although our Theoretical Analysis shows that it is generally assumed that it is easier to replace import sources than export off-takers, Korea's key vulnerability is its semiconductor industry's dependency on Japanese chemicals. Korea imports 94% of its fluorinated polyimide, 92% of its photoresists, and 44% of its hydrogen fluoride from Japan. Thus-produced semiconductors and related parts account for 30% of total Korean exports, further augmenting Korea's vulnerability to weaponization of trade tools in this industry. There is also a lower degree of substitutability of these chemicals for Korea since Japan produces 90% of the world's supply of fluorinated polyimide and photoresists; and 70% of the world's supply of hydrogen fluoride.

These are precisely the materials whose exports were restricted by Japan, although it did make some shipments possible, therefore not existentially threatening the world semiconductor supply chain.

The Korean public accordingly boycotted Japanese products. Sales of Japanese cars were allegedly down by 57% in August 2019 from a year earlier, Japanese beer sales by 97%. The Korean government and its manufacturers are now actively looking to produce the Japanese chemicals themselves or source them from other countries.

South Korea also threatened to walk out of a security intelligence-sharing agreement between the two countries concerning North Korea, but reversed this decision last minute. The threat is pending.

International institutions

South Korea has initiated a complaint at the WTO against the Japanese export restrictions. It remains to be seen whether a WTO ruling can overcome the hostile atmosphere in both countries, potentially creating a framework in which the two countries can come to terms not only with their current economic conflict, but with its underlying political reasons as well.

Gowa & Mansfield (1993) argue that free trade is more likely within, rather than across, political-military alliances, given the positive externalities of trading with an ally. If a country were to impose trade restrictions against an ally, it would be doing so by inflicting economic harm on said ally as well as inflicting harm on itself. In fact, because of the alliance structure binding the two countries together, the economic harm serves also as a negative security externality for the country imposing the trade restrictions. The theoretical framework therefore hypothesizes that the risk of massive escalation is mitigated by the fact that both countries are unwilling to do too much harm to the other because of their potential mutual losses within a constraining alliance structure. As South Korea and Japan, along with the U.S. are bound by a trilateral security alliance against North Korea, this conflict falls within the bounds of a trade conflict occurring within alliances, therefore making it more likely that the conflict's conclusion will play out in an institutional setting like the WTO's dispute settlement mechanism.

Key takeaways

This conflict is still ongoing, yet by applying our analysis of historical case studies and the key variables from our theoretical framework considered most critical for analyzing trade conflicts, we can begin building our set of core assumptions to tentatively project the direction of the conflict and its evolution.

Considering that the balance of power in this scenario is tilted in Japan's favor, and Japan seems to have more of an "upper hand" in this particular trade conflict stemming from Korea's higher dependence on its exports and lower substitutability of the goods (i.e. chemicals) in question, it is unsurprising that Japan initiated the conflict via weaponization of trade. As we've seen in prior historical cases (e.g. US-Japan 1939), the country with the upper hand tends to take the first aggressive action in initiating conflict by weaponizing trade; While in the cited case the country with a higher degree of vulnerability and less economic leverage (Japan back then, South Korea now) responded with a military response, South Korea today has a whole set of other diplomatic and economic tools to counter the Japanese trade weaponization. So far, South Korea has threatened to terminate its military information-sharing pact with Japan and mobilized its citizens to boycott the Japanese economy without any formal trade restrictions like tariffs or import quotas. This was only possible, as Japan and its present and historic relationship to South Korea is still at the forefront of the Korean public's minds (Kudo et al., 2019).

The conflict's conclusion will play out against the institutional backdrop of the WTO's dispute settlement mechanism. Depending on the WTO's ruling, we are likely to see both countries adhere to the WTO ruling. The WTO has a good chance of successfully constraining this case

because of the reputational risk at stake for both countries . In the assessed case of China-Japan in 2010, the aggressor (China) accepted the WTO’s ruling to scrap its tariffs, which had been (similar to this case) motivated by a geopolitical goal. Japan is equally eager as China in 2010, to be perceived as a reliable trading partner, and to follow international trade rules.

Taking into consideration the global balance of power and that the conflict is taking place between two East Asian neighbors allied against a hostile North Korea, it seems unlikely that this trade conflict will escalate into overt war or simply spiral into further aggression. Both governments would also face no difficulties selling a WTO agreement to their own populations, as both peoples strive for better relations with the other side (Kudo et al., 2019).

A potential longer-term impact from the fallout of this conflict’s conclusion, despite a settlement within the WTO, is that South Korea may be looking to reduce its economic and trade dependence on Japan to lessen its vulnerabilities in the future: “These actions create incentives for Korean chipmakers to significantly lessen their sourcing from Japanese suppliers, not only in specialized chemicals, but throughout the entire semiconductor supply chain.” (Goodman et al., 2019). This is particularly true as we see more and more instances of trade employed as a weapon for strategic and foreign policy goals. This is true particularly in light of the longstanding historical grievances between the two countries and the volatility of the relation stemming from such a past (particularly in the public sphere) that is unlikely to be resolved completely in the near future.

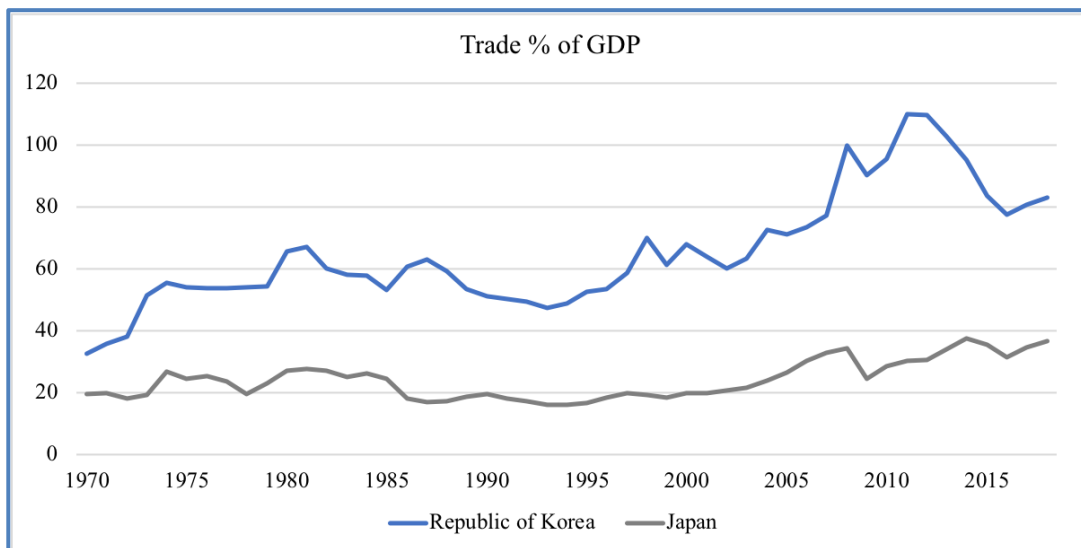


Figure 11: Trade as a percentage of GDP for South Korea and Japan, 1970 to 2018 (World Bank).

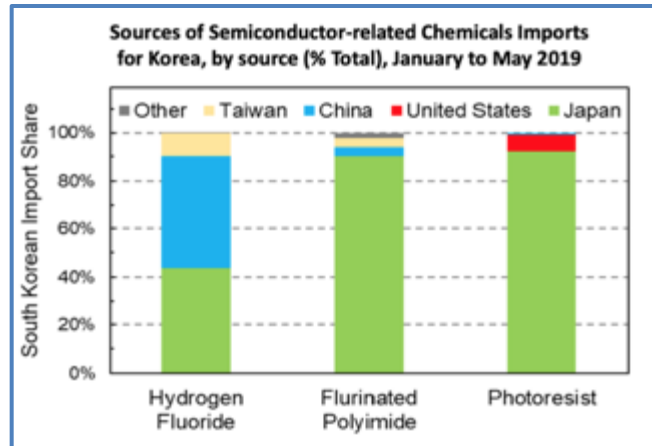


Figure 12: Breakdown of key South Korean imports by source in 2019 (Ezell).

5.4 Takeaways regarding the future of trade weaponization

From the two on-going trade conflicts, it is not hard to observe that the reason why countries weaponize trade today has further evolved from the historical cases. In historical cases, we can find clear economic (Steel tariffs 2000s) or geopolitical (Oil crisis 1970s) objectives for each state. However, in the two current cases, the objectives were intertwined. In the US-China case, even though the conflict was around economy and technology, it is believed that the primary cause was that rising China challenged the US hegemony and the US intended to slow down China's development (Kwan 2020). For the Japan-South Korea case, Japan imposed export controls for both the economic loss from and illegitimacy of the South Korean Supreme Court's ruling, while the Korean objective was even related to the historical grievances. Therefore, geopolitical supremacy could be a key variable seen in future trade conflicts. Right now, the US is also threatened by the EU, both economically and politically, and intends to divide the EU (Larres 2020). With the countries in the emerging market gaining more power in international society, it is possible to observe more conflicts over geopolitical motives.

It is worth noting how international institutions played differently in these two cases. In line with the Realist view and the hegemonic stability theory, a hegemon will opt for a liberal trade regime and establish rules to consolidate its power (Keohane 1997; Gilpin 1987; Cohn 2015). In this sense, the multilateral trade regime would mostly reflect the great power's interests. The US and China are the two great powers and possess an influence on the WTO. Even though both parties filed complaints with the WTO, the dispute settlement hardly worked as it was hard to find panelists for consultation at the beginning since both the US and China may object (Japan SPOTLIGHT 2018, 23). We also observed the insignificance of the WTO in this case where both parties took unjustified protectionist acts without recourse to the rules. However, the constraining power of the WTO in the Japan-South Korea case was stronger, not just because the two countries are of smaller sizes than the US and China, but also because they are strategic allies against North Korea. Overall, we project that the influence of the multilateral free trade regime will continue to fade away, especially without the appellate body as the last resort. However, it could still help solve disputes if the countries involved are allies, and the conflict is more on economic issues.

In addition, technology played a role in both cases. In the US-China case, the US claimed that China unfairly transferred technology from the US and was a threat to national security. Similarly, Japan imposed controls on chemical exports, which harmed the South Korean chips industry, with a reason for leaking sensitive information South to North Korea. The technology was not just a representative of more advanced development but connected to national security. The increment of trade for goods and services has slowed down while the trade for data and online transactions are booming. With fast-growing digital trade, which could affect all global trade in the future, technological leadership will be crucial to all countries. According to the realist view that countries tend to maximize their own security, a potential projection is that countries will invest more in technological development and tend to take protectionist acts over technology.

6.0 Conclusion

This report analyzes the development of trade conflicts since the onset of World War II, and presents a framework with which to guide further study of trade weaponization. Research was developed to answer three key questions: (1) Why do states engage in trade weaponization? (2) How do states employ trade weaponization? (3) How does weaponization of trade conclude?

First, we examined academic literature on trade to determine the key variables across which case studies would be analyzed. From this, we determined four key variables for analyzing weaponization: (A) the parties' vulnerability to trade restrictions, (B) their willingness to endure economic pain, (C) the potential security externalities, and (D) the possibility of solving a trade conflict over strong and potentially even institutional diplomatic/institutional channels. To assess these four variables, we organized four key axes along which to assess trade conflicts: (1) the objectives of the parties (geopolitical vs. economic), (2) the parties' relative economic and political vulnerability, (3) diplomatic relations and (4) the inclusion of international institutions such as the WTO in said conflict. We tested the relevance of these axes with historic case studies, analyzing eleven cases from the mid-20th century onwards.

We generally found mutual dependency, the substitutability of exports and imports, as well as the willingness to withstand economic suffering to be quite helpful to project the outcome of trade conflicts. However, the cases also showcased the difficulty of weighing dependency and determination against each other. The stronger and less dependent country might not always achieve its goals in a trade conflict. On the contrary, if a small state can rally its constituency behind an economic goal that justifies economic suffering, it can withstand the larger country's trade weaponization for a long time, possibly even overcoming it. If, additionally, international institutions can curtail the stronger state's aggressions and the conflict takes place within an alliance, a mutually beneficial solution is well achievable.

However, the relevance of international institutions like the WTO is currently under pressure. Assessing two of the most prominent contemporary trade conflicts (US-China and Japan-South Korea), we found the following two insights: First, while smaller countries still trust and need a rule-based framework of international trade, the US has lost faith in the WTO's possibility to turn China into a democratic and liberal market economy. Second, China on the other hand until recently still adhered to the WTO's rulings, itself still relying disproportionately on trade and thus

being vulnerable to trade weaponization. However, we project that China will also begin to reject the WTO's rulings, as it gets economically more independent. At the same time, China is likely to seek to reduce its dependency on the US consumers market by reaching new markets and boosting its own domestic demand.

Accordingly, a key trend to analyze in the future is the perception of trade both from the public and from government officials, especially in China and the USA. Is interdependence a weakness, in line with the Realist view? Alternatively, as the Liberal view suggests, is independence a strength insofar as political proximity reduces the likelihood of conflict? Whichever view dominates will influence the development of the WTO and the international trade system more broadly. This analysis is also relevant against the backdrop of politicians requesting more independence from international supply chains for medical equipment. The current struggle to get enough masks and other medical protection equipment might be grist for the mills of those, who have always seen trade interdependence as an inherently negative and disadvantageous situation.

To continue related study of trade weaponization, we would recommend the introduction of more quantitative measures of analysis to deepen one's understanding of how key trade variables presented here are associated with the emergence, development and outcome of weaponization. These quantitative measures could also take into account further economic tools which can be weaponized, such as visa and tourism restrictions, the curtailing of foreign direct investments and currency manipulation.

7.0 Bibliography

- 97th United States Congress. "Export Control on Oil and Gas Equipment." *Hearing, Washington D.C., G.P.O.*, p. 118. 1983.
- Ackman, Dan. "Ineffective Steel Tariffs Now Illegal Too." *Forbes*, November, 2003.
https://www.forbes.com/2003/11/11/cx_da_1111topnews.html#6ddc2888d004.
- Adekola, Tolulope Anthony, "US–China trade war and the WTO dispute settlement mechanism", *Journal of International Trade Law and Policy*, Vol. 18 No. 3, (2019): 125-135.
- Alt James and Michael Gilligan. "The Political Economy of Trading States: Factor Specificity, Collective Action Problems, and Domestic Political Institutions." *Journal of Political Philosophy* 2, no. 2 (1994).
- Angel, Norman. *The Great Illusion-A Study of the Relation of Military Power to National Advantage*. Read Books Ltd, 2011.
- Armstrong, Shiro, and Amy King. "Digging into the Rare Earth Embargo." Crawford School of Public Policy. The Australian National University, August 19, 2013.
<https://crawford.anu.edu.au/news-events/news/2432/digging-rare-earth-embargo>.
- Ball, George, "The Case against Sanctions", *New York Times*, September 12, 1982,
<https://www.nytimes.com/1982/09/12/magazine/the-case-against-sanctions.html>.
- Barnes, Harry Elmer. *Perpetual War for Perpetual Peace*. Caldwell: Caxton Press, 1953.
- Barton, John H.; Goldstein, Judith L.; Josling, Timothy E. and Richard H. Steinberg. *The Evolution of the Trade Regime: Politics, Law and Economics of the GATT and the WTO*. Princeton: Princeton University Press, 2006.
- Bastos, Maria-Ines. "How International Sanctions Worked: Domestic and Foreign Political Constraints on the Brazilian Informatics Policy." *The Journal of Development Studies* 30, no. 2 (January 1, 1994): 380–404. <https://doi.org/10.1080/00220389408422320>.
- BBC News. "The Banana Wars." December 15, 2009.
<http://news.bbc.co.uk/2/hi/business/8390099.stm>.
- Bekkers, Eddy; Francis, Joe; Nelson, Doug and Hugo Rojas-Romagosa. "Trade Wars and Trade Disputes: the Role of Equity and Political Support." *World Trade Institute*.
<https://wiiw.ac.at/rojas-romagosa-trade-wars-and-trade-disputes-the-role-of-equity-and-political-support-dlp-4880.pdf>.
- Bergsten, C. Fred; Ito, Takatoshi and Marcus Noland. "The Economics of Japan-United States Trade and Investment." In *No More Bashing: Building a New Japan-United States*

- Economic Relationship*, 113-156. Washington: Institute for International Economics, 2001.
- Bertelsmann Stiftung. "Revitalizing Multilateral Governance at the World Trade Organization: Report of the High-Level Board of Experts on the Future of Global Trade Governance". *Bertelsmann Stiftung*, 2018.
https://www.wto.org/english/news_e/news18_e/bertelsmann_rpt_e.pdf.
- Bisson, T. A. "American Trade and Japanese Aggression." *The Annals of the American Academy of Political and Social Science* 211 (1940): 123-29.
- Blakely, Christopher. Cooter, Joseph. Khaitan, Ahsu. Sincer, Iclal. Williams, Ross. "Rare Earth Metals & China", Gerald R. Ford School of Public Policy. 2012.
<http://sites.fordschool.umich.edu/china-policy/files/2012/09/Rare-Earth-Metals-China.pdf>
- Blustein, Paul. *Schism: China, America, and the Fracturing of the Global Trading System*. Ontario: Centre for International Governance Innovation (CIGI), 2019.
- Bouët, Antoine, and David Laborde. "US Trade Wars with Emerging Countries in the 21st Century." *International Food Policy Research Institute*, August 2017.
https://www.parisschoolofeconomics.eu/docs/koenig-pamina/article_us_tradewars_bouet_laborde_2017.pdf.
- Braathu, Jan. "Unilateralism and Alliance Cohesion: The United States, Western Europe, and the Regulation of Energy-related Trade with the Soviet Union." *Cooperation and Conflict*, X,VIII, 21-41. 1983.
- Bradsher, Keith. "Amid Tension, China Blocks Crucial Exports to Japan." *The New York Times*, September 23, 2010, sec. Business.
<https://www.nytimes.com/2010/09/24/business/global/24rare.html>.
- Bransteter, Lee. "Do trade restrictions work? Lessons from Japan in the 1980s." *PBS*, November 20, 2017. <https://www.pbs.org/newshour/economy/making-sense/do-trade-restrictions-work-lessons-from-trade-with-japan-in-the-1980s>.
- Brawley, Mark R. *Power, Money, and Trade: Decisions that Shape Global Economic Relations*. Toronto: University of Toronto, 2015.
- Bremmer, Ian. *Every nation for itself: what happens when no one leads the world*. New York: The Penguin Group, 2013.
- Bucheli, Marcelo. "Banana War Maneuvers." *Harvard Business Review*, November 1, 2005.
<https://hbr.org/2005/11/banana-war-maneuvers>.
- Burke, Hon. James A, "Quotas on Meat Products. Congressional Record". *United States Congress*. Vol. 110, part 5 (1964): 19277-20538.

- Burton-Christie; Ellen, Mary and Hang-Sheng Cheng. "U.S. Japan Trade." *Federal Reserve Bank of San Francisco*, April 8, 1983. <http://www.frbsf.org/economic-research/files/el83-14.pdf>.
- Bustamante, Rodrigo. "The Need for a GATT Doctrine of Locus Standi: Why the United States Cannot Stand the European Community's Banana Import Regime." *Minnesota Journal of International Law* 6, no. 53 (1997).
- Calabrese, Andrew and Wendy Redal. "Is there a U.S. foreign policy in telecommunications? Transatlantic trade policy as a case study" *Telematics and Informatics* 12, 1 (1995): 35-56.
- Central Intelligence Agency. *US-EEC Agricultural Trade: Case History of Poultry. Special Report*. Office of Current Intelligence, 1963.
- Central Intelligence Agency (CIA). *The Soviet Gas Pipeline in Perspective, Special National Intelligence Estimate*. National Intelligence Estimate. September 21, 1982. <https://www.cia.gov/library/readingroom/docs/19820921.pdf>.
- Central Intelligence Agency (CIA). "CIA Factbook 1982." 1982. <https://www.cia.gov/library/readingroom/docs/CIA-RDP08-00534R000100180001-3.pdf>.
- Cha, Victor, "Powerplay: Origins of U.S. Alliances in Asia", *International Security*. Winter 2009–2010, 34 (3): 158–196.
- Chang, Ha-Joon. *Bad Samaritans: The myth of free trade and the secret history of capitalism*. New York, Bloomsbury Publishing, 2010.
- Cheng, Leonard K.; Whitten, Gregory W. and Jingbo Hua. "The National Security Argument for Protection of Domestic Industries." *Journal of Chinese Economic and Business Studies* 17, no. 4 (February 2019): 365–88. <https://doi.org/10.1080/14765284.2020.1732091>.
- Chinn, Menzie, and Bill Plumley, "What Is the Toll of Trade Wars on U.S. Agriculture?". *Econofact*, January 16, 2020. <https://econofact.org/what-is-the-toll-of-trade-wars-on-u-s-agriculture>.
- Cohn, Theodore. *Global Political Economy*. New York: Routledge, 2015.
- Committee on Finance, *Trade Expansion Act of 1962*. United States. Congress. Senate. Committee on Finance, 1962.
- Committee on Foreign Affairs, *Foreign Assistance Legislation for Fiscal Year 1985*. United States. Congress. House. Committee on Foreign Affairs, 1985.

- Committee on Ways and Means, *Trade Expansion Act of 1962*. United States. Congress. House. Committee on Ways and Means, 1962.
- Conkin, Paul, *Revolution Down on the Farm: The Transformation of American Agriculture since 1929*. University Press of Kentucky, 2008.
- Copeland, Dale C. “Economic interdependence and war.” *Princeton University Press* 148 (2014).
- Coppolaro, Lucia, “The Six, Agriculture, and GATT. An International history of the CAP Negotiations (1958–1967)”. in Kiran Patel (ed.). *Fertile Ground for Europe? The History of European Integration and the Common Agricultural Policy since 1945*. Baden-Baden: Nomos, (2009): 201-209.
- Cowhey, Peter F. “Domestic Institutions and the Credibility of International Commitments: Japan and the United States.” *International Organization* 47, no. 2 (1993): 299–326. www.jstor.org/stable/2706892.
- Cowhey, Peter F. "States and Politics in American Foreign Economic Policy." In *International Trade Policies: Gains from Exchange between Economics and Political Science*, edited by John S. Odell and Thomas D. Willett. Ann Arbor, MI: University of Michigan Press, 1990.
- Crandall, Robert W. “The Effects of U.S. Trade Protection for Autos and Steel.” *Brookings Papers on Economic Activity* 1987, no. 1 (1987): 271-288.
- Curran, Enda, “China Takes the Long View on Trump’s Trade War: Balance of Power”. *Bloomberg*, May 21, 2019. <https://www.bloomberg.com/news/articles/2019-05-21/china-takes-the-long-view-on-trump-s-trade-war-balance-of-power>.
- Dam, Kenneth W, *The European Common Market in Agriculture*. Columbia Law Review 209, 1967.
- Dave, B. B, “International Trade War—The future of Dollar Hegemony and the WTO”. *The Clarion*, Volume 8 Number 2, (2019): 21-32.
- De Graaff, N. and Apeldoorn, B. V, “US–China relations and the liberal world order: Contending elites, colliding visions?”. *International Affairs*, 94(1), (2018): 113–131.
- Destler, I.M. “Mac”, “America’s Uneasy History with Free Trade”, *Harvard Business Review*. April 28, 2016. <https://hbr.org/2016/04/americas-uneasy-history-with-free-trade>.
- Diamond, Jeremy, “Trump: 'We can't continue to allow China to rape our country'”. *CNN*, May 2, 2016. <https://www.cnn.com/2016/05/01/politics/donald-trump-china-rape/index.html>.

- Digital Research in European Studies. "The EEC and the two blocs". Historical events in the European integration process (1945–2014). Accessed April 16, 2020. <https://www.cvce.eu/en/recherche/unit-content/-/unit/02bb76df-d066-4c08-a58a-d4686a3e68ff/7a99db8f-f46a-45dd-8855-a9684a61faeb>.
- Doyle, Michael W. "Liberalism and world politics." *American political science review* 80, no. 4 (1986): 1151-1169.
- Evans, Peter. *Embedded Autonomy: States and Industrial Transformation*. Princeton: Princeton University Press, 1995.
- Ember, Steve. "US-Japan Relations Before World War Two." *Voice of America*, May 26, 2011. <https://learningenglish.voanews.com/a/america-history-relations-between-us-japan-worsen--122622634/116119.html>.
- Erken, Hugo, Björn Giesbergen, and Lize Nauta, "US-China Trade War: Which Sectors Are Most Vulnerable in the Global Value Chain?". *RaboResearch - Economic Research*, August 14, 2019. <https://economics.rabobank.com/publications/2019/august/us-china-trade-war-most-vulnerable-sectors/>.
- Etzioni, Amitai, "Behavioral Economics: Toward a New Paradigm". *American Behavioral Scientist*, 55(8), (2011): 1099–1119.
- Evans, Peter B. "Declining Hegemony and Assertive Industrialization: U.S.-Brazil Conflicts in the Computer Industry." *International Organization* 43, no. 2 (1989): 207–38.
- Ezell, Stephen. "The Effect of Korea-Japan Relations on Trade and The Global Economic Order." KEI-KITA Joint Seminar. Presentation by the Information Technology & Innovation Foundation (ITIF), October 16, 2019. <http://www2.itif.org/2019-japan-korea-trade-global.pdf>.
- Fajgelbaum, Pablo D., Goldberg, Pinelopi K., Kennedy, Patrick J., and Khandelwal, Amit K. "The return to protectionism". NBER Working Paper 25638. *National Bureau of Economic Research*. 2019.
- Farrell, Henry and Abraham Newman. "Japan and South Korea Are Being Pulled into a Low Level Economic War." *The Washington Post*, August 1, 2019. <https://www.washingtonpost.com/politics/2019/08/01/japan-has-weaponized-its-trade-relationship-with-south-korea/>.
- Fatma, Ayesha and Bharti, Nalin, "Perception vs. reality: understanding the US–China trade war". *Transnational Corporations Review*. VOL. 11, NO. 4, (2019): 270–278.
- Feenstra, Robert C. *Advanced International Trade: Theory and Evidence*. Princeton: Princeton University Press, 2015.

- Finger, J. Michael. "Trade Wars: The Theory and Practice of International Commercial Rivalry." *Journal of International Economics* 25, no. 3-4 (1988): 392–96.
[https://doi.org/10.1016/0022-1996\(88\)90067-0](https://doi.org/10.1016/0022-1996(88)90067-0).
- Fitzgerald, Maggie, "Here's What New Tariffs Will Cost the Average American Household". *CNBC*, August 19, 2019. <https://www.cnbc.com/2019/08/19/heres-what-new-tariffs-will-cost-an-average-american-household.html>.
- Food and Agriculture Organization, *The State of Food and Agriculture Organization 1963*. Food and Agriculture Organization of the United Nations, 1963.
- Francois, Joseph and Laura Baughman. "The Unintended Consequences of US Steel Import Tariffs: A Quantification of the Impact During 2002." *CITAC Foundation*, February, 2003.
http://www.tradepartnership.com/pdf_files/2002jobstudy.pdf.
- Geyelin, Philip. "Pasta War." *The Washington Post*, July 24, 1985.
<https://www.washingtonpost.com/archive/politics/1985/07/24/pasta-war/588ed130-4008-4037-b31e-9893e8d97ba5/>.
- Gilbert, Mark. Review: *A Polity Constructed: New Explorations in European Integration History*. *Contemporary European History*, Vol. 19, No. 2, (2010): 169-179.
- Gillespie, Patrik. "Those Reagan tariffs Trump loves to talk about." *CNN*, July 27, 2016.
<https://money.cnn.com/2016/07/27/news/economy/donald-trump-ronald-reagan-trade-japan/index.html>.
- Gilpin, Robert and Jean M. Gilpin. *Global Political Economy: Understanding the International Economic Order*. Princeton: Princeton University Press, 2001.
- Goodman, Samuel, John Verwey, and Dan Kim. "The South Korea-Japan Trade Dispute in Context: Semiconductor Manufacturing, Chemicals, and Concentrated Supply Chains." *Social Science Research Network*, October 24, 2019.
<https://doi.org/10.2139/ssrn.3470271>.
- Gowa Joanne. "Public Goods and Political Institutions: trade and monetary policies in the US." *International Organisation* 42, no. 1 (Winter 1988): 15-32.
- Gowa, Joanne, and Edward D. Mansfield. "Power politics and international trade." *American political science review* 87, no. 2 (1993): 408-420.
- Gowa, Joanne and Raymond Hicks. "Politics, Institutions, and Trade: Lessons of the Interwar Era." *International Organization* 67, no. 3 (July 25, 2013).

- Griffiths, James. “The US won a trade war against Japan. But China is a whole new ball game.” *CNN*, May 24, 2019. <https://www.cnn.com/2019/05/24/business/us-china-trade-war-japan-intl/index.html>.
- Grossman, Gene M. and Elhanan Helpman. “The Politics of Free-Trade Agreements.” *The American Economic Review* 85, no. 4 (1995): 667–90.
- Grossman, Gene M. and Elhanan Helpman. “Trade Wars and Trade Talks.” *Journal of Political Economy* 103, no. 4 (1995): 675–708.
- Guyomard, Hervé, Chantal Le Mouël, Fabrice Levert and Jahir Lombana. “The Tariff-Only Import Regime for Bananas in the European Union: Is Setting the Tariff at Right Level an Impossible Mission?” (2005). https://www.researchgate.net/publication/23509330_The_Tariff-Only_Import_Regime_for_Bananas_in_the_European_Union_Is_Setting_the_Tariff_at_Right_Level_an_Impossible_Mission
- Gwertzman, Bernard. 1982, “Reagan Lifts Sanctions Against the Soviets”, *New York Times*, November 14, 1982. <https://www.nytimes.com/1982/11/14/world/reagan-lifts-sanctions-on-sales-for-soviet-pipeline-reports-accord-with-allies.html>.
- Hankla, Charles, “Who Has the Upper Hand in the U.S.-China Trade War?”. *Market Watch*, August 9, 2019. <https://www.marketwatch.com/story/who-has-the-upper-hand-in-the-us-china-trade-war-2019-08-05>.
- Harding, Rebecca, and Jack Harding. *The Weaponization of Trade: The Great Unbalancing of Politics and Economics*. London: London Publishing Partnership, 2017.
- Harris, Emaline; Pemberton, Carlisle and Afiya De Sormeaux. “The Impact of the Banana Trade Regime (BTR) and the Banana War on Dominica’s Banana Industry.” *Tropical Agriculture* 87, no. 4 (2010): 182–98.
- Hedged, Irwin R. “The Trade Expansion Act. Farmer’s World” In *The Year Book of Agriculture*, 379-384. United States Department of Agriculture. 1964.
- Henderson, David R. *The Concise Encyclopedia of Economics*. Indianapolis: Liberty Fund, 2002.
- Higgs, Robert. “How U.S. Economic Warfare Provoked Japan's Attack on Pearl Harbor.” *The Independent Institute*, May 1, 2006. <https://www.independent.org/news/article.asp?id=1930>.
- Hirschman, Albert O. *National power and the structure of foreign trade*. Vol. 105. Univ of California Press, 1980.
- Hoekman, Bernard, “Trade Wars and the World Trade Organization: Causes, Consequences, and Change”. *Asian Economic Policy Review* Vol 15, (2020): 98–114.

- Hoffman, David. "Reagan Approved Plan to Sabotage Soviets." *The Washington Post*, February 27, 2014. <https://www.washingtonpost.com/archive/politics/2004/02/27/reagan-approved-plan-to-sabotage-soviets/a9184eff-47fd-402e-beb2-63970851e130/>.
- Hufbauer, Gary and Ben Goodrich. "Time for a Grand Bargain in Steel?" *Peterson Institute for International Economics*, January 2002. <https://www.piie.com/publications/policy-briefs/time-grand-bargain-steel>.
- Hughes, Neil C. "A Trade War with China?" *Foreign Affairs*, January 28, 2009. <https://www.foreignaffairs.com/articles/asia/2005-07-01/trade-war-china>.
- Hull, Cordell. "Abrogation by the United States of the Treaty of Commerce and Navigation." UW-Madison Libraries, July, 26, 1939. <http://images.library.wisc.edu/FRUS/EFacs/193141v02/reference/frus.frus193141v02.i0010.pdf>.
- Hurst, Cindy. "China's Rare Earth Elements Industry: What Can the West Learn?." Fort Belvoir, VA: Defense Technical Information Center, March 1, 2010. <https://doi.org/10.21236/ADA525378>.
- Hurst, Cindy. "Japan's Approach to China's Control of Rare Earth Elements." Jamestown, April 22, 2011. <https://jamestown.org/program/japans-approach-to-chinas-control-of-rare-earth-elements/>
- Ikenberry, G. John. *Reasons of state: Oil politics and the capacities of American government*. Ithaca: Cornell University Press, 2018.
- Inoue, Yuko. "China Lifts Rare Earth Export Ban to Japan: Trader." *Reuters*, September 29, 2010. <https://www.reuters.com/article/us-japan-china-export-idUSTRE68S0BT20100929>.
- Irwin, Douglas A. *Clashing over Commerce: A History of US Trade Policy*. Chicago: The University of Chicago Press, 2017.
- Irwin, Douglas A. *Free Trade under Fire: Fourth Edition*. Princeton: Princeton University Press, 2015.
- Jang, Shelley. "Japan's Export Controls Threaten South Korean Tech Companies." Fitch Ratings, July 15, 2019. <https://www.fitchratings.com/research/corporate-finance/japan-export-controls-threaten-south-korean-tech-companies-15-07-2019>.
- Japan SPOTLIGHT. "Special Interview 1: The Future Direction of the Trade War & Role of the WTO". *Japan SPOTLIGHT*. September/October 2018.

- Jha, Saurav. "Did China Overplay Rare Earth Hand? – The Diplomat," November 17, 2010. <https://thediplomat.com/2010/11/did-china-overplay-rare-earth-hand/>.
- Jiang, Sijia and Martina, Michael, "Huawei's \$105 billion business at stake after U.S. broadside". *Reuters*, May 16, 2019. <https://www.reuters.com/article/us-usa-trade-china-huawei-analysis/huaweis-105-billion-business-at-stake-after-us-broadside-idUSKCN1SM123>.
- Jones, Callum, "Trump cools China trade deal hopes". *The Times*, May 24, 2018. <https://www.thetimes.co.uk/article/trump-cools-china-trade-deal-hopes-sww83v70p>.
- Katzenstein, Peter J. "Introduction: Domestic and International Forces and Strategies of Foreign Economic Policy." *International Organization* 31, no. 4 (1977): 587–606. www.jstor.org/stable/2706315.
- Katzner, Donald W. and Mikhail J. Nikomarvo. "Exercises in Futility: Post-War Automobile-Trade Negotiations between Japan and the United States." *University of Massachusetts Amherst Economics Department Working Paper Series* 52 (2005). https://scholarworks.umass.edu/econ_workingpaper/52.
- Keefe, Eugene K., Federal Research Division Library of Congress, and Raymond E. Zickel. "Soviet Union: A Country Study". *Washington, D.C.: Federal Research Division, Library of Congress: For sale by the Supt. of Docs., U.S. G.P.O.*, 1991. <https://www.loc.gov/item/90025756/>.
- Keohane, Robert O. *After hegemony: Cooperation and discord in the world political economy*. Princeton: Princeton University Press, 2005.
- Keohane, Robert O. *Power and governance in a partially globalized world*. London: Routledge, 2002.
- Keohane, Robert O. and Joseph S. Nye. "Interdependence in world politics." *The Theoretical evolution of international political economy: a reader* (1997): 122-140.
- Keohane, Robert O. and Joseph S. Nye. "Power and Interdependence revisited." *International organization* 41, no. 4 (1987): 725-753.
- Keohane, Robert O. and Joseph S. Nye. "Power and interdependence in the information age." *Foreign Affairs* 77 (1998): 81.
- Ketels, Christian, Bhattacharya, Arindam and Satar, Liyana, "Global Trade Goes Digital". *Boston Consulting Group*. 2019. <https://www.bcg.com/publications/2019/global-trade-goes-digital.aspx>.
- Kilborn, Peter, "U.S. Trade Deficit Set Record in 1984." *New York Times*, January 31, 1985. <https://www.nytimes.com/1985/01/31/business/us-trade-deficit-set-record-in-1984.html>.

- Kissinger, Henry. *Diplomacy: History of Diplomacy and the Balance of Power*. New York: Simon & Schuster, 1994.
- Krasner, Stephen D. “A statist interpretation of American oil policy toward the Middle East.” *Political Science Quarterly* 94, no. 1 (1979): 77-96.
- Krasner, Stephen D. “State Power and the Structure of International Trade.” *World Politics* 28, no. 3 (1976): 317-347.
- Krasner, Stephen D. “Structural causes and regime consequences: regimes as intervening variables.” *International Organization* 36, no. 2 (1982): 185-205.
- Krugman, Paul R. *Empirical Studies of Strategic Trade Policy*. Chicago: University of Chicago Press, 1996.
- Krugman, Paul R. “Is Free Trade Passé?” *Journal of Economic Perspectives* 1, no. 2 (1987): 131–44.
- Krugman, Paul R.; Obstfeld, Maurice and Marc J. Melitz. *International Economics: Theory and Policy*. Boston: Pearson, 2015.
- Kwan, Chi Hung, “Expansion and Prolonging of U.S.-China Trade Friction—Conspicuous Trend of Decoupling”. *Research Institute of Economy, Trade and Industry*, 2019.
<https://www.rieti.go.jp/en/china/19062601.html>.
- Kwan, Chi Hung, “The China–US Trade War: Deep-Rooted Causes, Shifting Focus and Uncertain Prospects”. *Asian Economic Policy Review* Vol 15, (2020): 55–72.
- Lamy, Pascal. “Statement by EU Trade Commissioner Pascal Lamy in Reaction to US Measures on Steel.” European Commission, March 6, 2002.
https://ec.europa.eu/commission/presscorner/detail/en/IP_02_379.
- Larres, Klaus, “Trump’s trade wars: America, China, Europe, and global disorder”. *Journal of Transatlantic Studies*. Vol 18, (2020):103–129.
- Liu, Dan. “Diaoyu Islands Dispute: A Chinese Perspective,” August 8, 2018.
<https://thediplomat.com/2018/08/diaoyu-islands-dispute-a-chinese-perspective/>.
- Long, Heather. “Remember Bush’s 2002 steel tariffs? His chief of staff warns Trump not to do the same.” *The Washington Post*, March 2018.
<https://www.washingtonpost.com/news/wonk/wp/2018/03/06/remember-bushs-2002-steel-tariffs-his-chief-of-staff-warns-trump-not-to-do-the-same/>.
- Longley, Robert. “The Chicken Tax and Its Influence on the U.S. Auto Industry”. *ThoughtCo*, 2019. <https://www.thoughtco.com/chicken-tax-4159747>.

- Lukin, Vladimir. "Relations between the U.S. and China in the 1980s." *Asian Survey* 24, no. 11 (1984): 1151–56. <https://doi.org/10.2307/2644149>.
- Lundestad, Geir. *The United States and Western Europe Since 1945 : From 'Empire' by Invitation to Transatlantic Drift*. Oxford University Press, 2003.
- Madsen, Jakob B. "Trade Barriers and the Collapse of World Trade during the Great Depression." *Southern Economic Journal* 67, no. 4 (2001): 848-68.
- Mantzopoulos, Victoria and S.J., Raphael Shen, "An Analysis of a Trade War With China". *Journal of Business and Behavioral Sciences*, Vol 31, No 2, 2019.
- Mayer, Wolfgang. "Endogenous Tariff Formation." *The American Economic Review* 74, no. 5 (1984): 970–85.
- Melatos, Mark; Raimondos-Moller, Pascalis and Matthew Gibson. "Who Wins a Trade War?" *European Trade Study Group (ETSG)*, August 31, 2007. <https://www.etsg.org/ETSG2007/papers/melatos.pdf>.
- Ministry of Economy, Trade, and Industry. "Project on developing alternatives on rare earths". 2011.
- Molotsky, Irvin. "A Pasta War May Be at Hand." *New York Times*, June 21, 1985. <https://www.nytimes.com/1985/06/21/business/a-pasta-war-may-be-at-hand.html>.
- Morell, Michael and Kris, David, "It's a not trade war with China. It's a tech war". *Washington Post*. December 14, 2018. https://www.washingtonpost.com/opinions/its-not-a-trade-war-with-china-its-a-tech-war/2018/12/14/ec20468e-ffc5-11e8-862a-b6a6f3ce8199_story.html.
- Morrison, W. M. "China-U.S. Trade Issues". *Congressional Research Services*. 2018.
- Mulgan, Aurelia George. "Is Japan Weaponising Trade against South Korea?" East Asia Forum, March 26, 2020. <https://www.eastasiaforum.org/2019/11/22/is-japan-weaponising-trade-against-south-korea/>.
- NATO. "Origins - NATO Leaders: Lord Ismay." Accessed April 30, 2020. https://www.nato.int/cps/en/natohq/declassified_137930.htm.
- Nephew, Richard. "The Art of Sanctions: A View From the Field". New York: Columbia University Press, 2017.
- Nephew, Richard. "Transatlantic Sacntions Policy: From the 1982 Soviet Gas Pipeline Episode to Today," 2019. <https://energypolicy.columbia.edu/sites/default/files/pictures/REPORT.pdf>.

- New York Times. "The Great Textile Robbery." October 26, 1987.
<https://www.nytimes.com/1987/10/26/opinion/the-great-textile-robbery.html>.
- Norwood, Bernard, "The Kennedy round: A Try at Linear Trade Negotiations". *The Journal of Law & Economics*. Vol. 12, No. 2 (Oct., 1969): 297-319.
- Oatley, Thomas. *International Political Economy*. New York: Routledge, 2015.
- Oldham, Jennifer, and David Neiman. "U.S.-JAPAN TRADE ACCORD: Trading Challenges." *Los Angeles Times*, June 29, 1995. <https://www.latimes.com/archives/la-xpm-1995-06-29-mn-18531-story.html>.
- Obe, Mitsuru. "Inside the Lose-Lose Trade Fight between Japan and South Korea." *Nikkei Asian Review*, July 31, 2019. <https://asia.nikkei.com/Spotlight/Cover-Story/Inside-the-lose-lose-trade-fight-between-Japan-and-South-Korea>.
- Obstfeld M, "Global economy: Good news for now but trade tensions a threat". *IMF Blog*, April 17, 2018 <https://blogs.imf.org/2018/04/17/global-economy-good-news-for-now-but-trade-tensions-a-threat/>.
- Office of the United States Trade Representative, "President Trump announces strong actions to address China's unfair trade". *Press Releases*. March 22, 2018a. <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/march/president-trump-announces-strong>.
- Office of the United States Trade Representative, "Findings of the investigation into China's acts, policies, and practices related to technology transfer, intellectual property, and innovation under Section 301 of the Trade Act of 1974". *Press Releases*. March 22, 2018b. [https://ustr.gov/sites/default/files/Section 301 FINAL.PDF](https://ustr.gov/sites/default/files/Section%20301%20FINAL.PDF).
- Oneal, John R. and Bruce Russett. "Assessing the liberal peace with alternative specifications: Trade still reduces conflict." *Journal of Peace Research* 36, no. 4 (1999): 423-442.
- Ono, Yukako and Yasoshima, Ryohei, "RCEP trade agreement delayed till 2018". *Nikkei Asian Review*, November, 2017. <https://asia.nikkei.com/Politics-Economy/International-Relations/RCEP-trade-agreement-delayed-till-2018>.
- Ortiz-Ospina and Diana Belekain. "Trade and Globalization." *Our World in Data*. October 2011. <https://ourworldindata.org/trade-and-globalization>.
- Ossa, Ralph. "Trade Wars and Trade Talks with Data." *American Economic Review* 104, no. 12 (2014): 4104-46.
- Palmer, Doug. "Why steel tariffs failed when Bush was president" *Politico*, March, 2018.

- <https://www.politico.eu/article/bush-trump-tariffs-why-steel-and-aluminum-failed-when-president/>.
- Patel, Kiran Klaus, “Who was saving whom? The European Community and the Cold War, 1960s–1970s”. *The British Journal of Politics and International Relations*, Vol. 19(1) (2017): 29–47.
- Penrose, E. “Oil and International Relations.” *Review of International Studies* 2, no. 1 (1976): 41-50.
- Pence, M, “Remarks by Vice President Pence on the administration’s policy toward China”. *The Hudson Institute, Washington*. October 4, 2018. <https://www.whitehouse.gov/briefings-statements/remarks-vice-president-pence-administrationspolicy-toward-china/>.
- Pomeroy, Sarah B.; Pomeroy, Burstein Donlan; Burstein, Stanley M.; Donlan, Walter and Jennifer Tolbert Roberts. *Ancient Greece: a political, social, and cultural history*. Oxfordshire: Oxford University Press, 1999.
- Porter, James M. and Bowers, Douglas E. *A Short History of US Agricultural Trade Negotiations. Staff Report no. AGES 89-23*. Washington D.C.: Agricultural and Rural Economy Division, Economics Research Service, U.S. Department of Agriculture, 1989.
- Putnam, Robert D. “Diplomacy and Domestic Politics: The Logic of Two-Level Games.” *International Organization* 42, no. 3 (1988): 427–60.
- Qiu, Larry D.; Zhan, Chaoqun and Xing Wei. “An Analysis of the China–US Trade War Through the Lens of the Trade Literature.” *Economic and Political Studies* 7, no. 2 (March 2019): 148–68.
- Rampulla, Ellie, “The Effects of the US-China Trade War on US Exports”. *Wharton Public Policy Initiative*, January 27, 2020. <https://publicpolicy.wharton.upenn.edu/live/news/3218-the-effects-of-the-us-china-trade-war-on-us-for-students/blog/news>.
- Raum, Tom. “US Reaches Tentative Settlement with Europe in ‘Pasta War.’” *Associated Press*, August 5, 1987. <https://apnews.com/d0c0247860a8b124c2a1eea8263bef0a>.
- Read, Robert. “The Anatomy of the EU-US WTO Banana Trade Dispute.” *Estey Centre Journal of International Law and Trade Policy* 2, no. 2 (2001): 257–82.
- Rodrik, D. *The globalization paradox: democracy and the future of the world economy*. WW Norton & Company, 2011.
- Rogers, Jason, Stringer, David and Ritchie, Martin, “China gears up to weaponize rare earths dominance in trade war”. *Bloomberg*, May 29, 2019.

- <https://www.bloomberg.com/news/articles/2019-05-29/china-gears-up-to-weaponize-rare-earths-dominance-in-trade-war>.
- Rosecrance, Richard N. *The Rise of the Trading State: Commerce and Conquest in the Modern World*. New York: Basic Books, 1986.
- Ruggie, John Gerard. "International regimes, transactions, and change: embedded liberalism in the postwar economic order." *International Organization* 36, no. 2 (1982): 379-415.
- Russett, Bruce and John Oneal. *Triangulating peace: Democracy, Interdependence, and International Organizations*. New York: W.W. Norton, 2001.
- Sachs, J. D, "The war on Huawei". *Project Syndicate*, December 11, 2018. <https://www.project-syndicate.org/commentary/trump-war-on-huawei-meng-wanzhou-arrest-by-jeffrey-d-sachs-2018-12?barrier=accesspaylog>.
- Sachs, J. D, "Will America create a cold war with China?". *Center for International Relations and Sustainable Development*. No 13, 2019. <https://www.cirsd.org/en/horizons/horizons-winter-2019-issue-no-13/willamerica-create-a-cold-war-with-china>.
- Samuelson, Tracey. "How the U.S. outgrew 1980s trade anxiety over Japan." *Marketplace*, November 29, 2018. <https://www.marketplace.org/2018/11/29/how-us-outgrew-1980s-anxiety-over-japan/>.
- Schott, Jeffrey J. and Jung, Euijin, "In US-China Trade Disputes, the WTO Usually Sides with the United States". *Peterson Institute for International Economics (PIIE)*. Accessed on April 4, 2020. <https://www.piie.com/blogs/trade-and-investment-policy-watch/us-china-trade-disputes-wto-usually-sides-united-states>.
- Shida, Tomio. "History Offers Lessons in Escaping China's Rare-Earth Dominance - Nikkei Asian Review," June 25, 2019. <https://asia.nikkei.com/Economy/Trade-war/History-offers-lessons-in-escaping-China-s-rare-earth-dominance2>.
- Shen, Guobing. *The Research on Trade Effects and Non-trade Effects of U.S. Antidumping Actions against China*. Beijing: Beijing Book Co. Inc, 2013.
- Shen, Yuzhou, Moomy, Ruthann. & Eggert, G. Roderick. China's public policies toward rare earths, 1975–2018. *Miner Econ*, 2020. <https://doi.org/10.1007/s13563-019-00214-2>
- Smith, Adam. *The Wealth of Nations*. New York: The Modern Library, 1776.
- Sullivan, Lawrence R. *Historical Dictionary of the Chinese Economy*. London: Rowman & Littlefield, 2017.

- Summer, Scott, "Who Is Most Vulnerable in a Trade War?". *Econlib*, May 14, 2019. <https://www.econlib.org/who-is-most-vulnerable-in-a-trade-war/>.
- Suzuki, Kazuto. "Weaponising Trade in the Japan–South Korea Dispute." East Asia Forum, March 6, 2020. <https://www.eastasiaforum.org/2019/12/28/weaponising-trade-in-the-japan-south-korea-dispute/>.
- Swan, William L. "Japan's Intentions for Its Greater East Asia Co-Prosperity Sphere as Indicated in Its Policy Plans for Thailand." *Journal of Southeast Asian Studies*, Vol. 27, No. 1 (1996): 139-149.
- Ruggie, John Gerard. "International regimes, transactions, and change: embedded liberalism in the postwar economic order." *International Organization* 36, no. 2 (1982): 379-415.
- Talbot, Ross B. *The Chicken War: An International Trade Conflict between the United States and the European Economic Community, 1961-1964*. Iowa State University Press, 1978.
- "The Japan-South Korea Joint Public Opinion Poll 2019." The Genron NPO, June 12, 2019. http://www.genron-npo.net/en/opinion_polls/archives/5489.html.
- The White House, "Remarks by President Trump on His Trip to Asia". *The White House*, November 15, 2017. <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-trip-asia/>.
- Time. "Trade: Pasta War Ready to Boil." July 1, 1985. <http://content.time.com/time/magazine/article/0,9171,959518,00.html>.
- Time. "Western Europe: Nobody But Their Chickens". *Time*, November 30, 1962. <http://content.time.com/time/magazine/article/0,9171,829587,00.html>.
- Tooze, Adam. *Crashed: How a decade of financial crises changed the world*. New York: Penguin, 2018.
- "Treaty of Commerce and Navigation between the United States and Japan." *The American Journal of International Law* 5, no. 2 (1911): 100-06. doi:10.2307/2212526.
- United Nations Statistics Division. "International Trade Statistics: 1900-1960." United Nations International Trade Statistics, May 1962. <https://unstats.un.org/unsd/trade/imts/Historical%20data%201900-1960.pdf>.
- United States Census Bureau. "Statistical Abstract of the United States: 1939." The United States Census Bureau, July 24, 2015. <https://www.census.gov/library/publications/1940/compendia/statab/61ed.html>.

- United States Census Bureau, "U.S. Trade in Goods and Services - Balance of Payments (BOP) Basis." The United States Census Bureau.
<https://www.census.gov/foreign-trade/statistics/historical/gands.pdf>.
- United States Census Bureau, "Trade by Partner Countries." Accessed April 30, 2020.
<https://www.census.gov/foreign-trade/balance/index.html>.
- US Census Bureau. "Foreign Trade: Trade in Goods with Brazil." Accessed April 30, 2020.
<https://www.census.gov/foreign-trade/balance/c3510.html>.
- UPI. "U.S. and Europe Settle Pasta and Citrus Dispute." *New York Times*, August 11, 1986.
<https://www.nytimes.com/1986/08/11/business/us-and-europe-settle-pasta-and-citrus-dispute.html>.
- U.S. Dept. of Agriculture. *Foreign Agriculture*. United States. Dept. of Agriculture. Foreign Agricultural Service, 1961.
- U.S. Dept. of Agriculture. *The 1964 Western Europe agricultural situation : supplement no. 2 to the 1964 world agricultural situation*. United States. Dept. of Agriculture. Economic Research Service. Western Europe Branch, 1964.
- US Department of Commerce, "U.S. International Trade in Goods and Services". *US Department of Commerce*.
<https://www.bea.gov/system/files/2019-03/trad1218.pdf>.
- U.S. Department of State. "Termination of the 1911 Treaty of Commerce and Navigation between the United States and Japan; Discussion of Situation in Treatyless Period." U.S. Office of the Historian, 1940.
<https://history.state.gov/historicaldocuments/frus1940v04/ch3subch4>.
- U.S. Department of the Treasury, "Major Foreign Holders of Treasury Securities". *U.S. Department of the Treasury*. <https://ticdata.treasury.gov/Publish/mfhhis01.txt>.
- Vekasi, Kristin. "Politics, Markets, and Rare Commodities: Responses to Chinese Rare Earth Policy." *Japanese Journal of Political Science* 20, no. 1 (March 2019): 2–20.
<https://doi.org/10.1017/S1468109918000385>.
- Walker, Herman, "Dispute Settlement: The Chicken War". *The American Journal of International Law*, Vol. 58, No. 3, (1964): 671-685.
- Waltz, Kenneth N. *Theory of International Politics*. Long Grove: Waveland Press, 2010.
- Wang, Dong. *The United States and China: A History from the Eighteenth Century to the Present*. London: Rowman & Littlefield, 2013.
- Wang Yong. *The Economic and Trade Relationships between the US and China*. XiuWei, 2007.

- Warden, Thomas A. *U.S. Agriculture's First Year Under EEC Variable Import Levies*. Trade Statistics and Analysis Branch, Development and Trade Analysis Division, Economic Research Service, U.S. Department of Agriculture, 1965.
- Weidenbaum, Murray L. "Chapter X." In *Beyond the Status Quo: Policy Proposals for America*, edited by David Boaz and Edward H. Crane, XX. Washington, D.C.: Cato Institute, 1985.
- West, John. "The China-Japan Economic Relationship Is Getting Stronger." BRINK – News and Insights on Global Risk, January 20, 2020. <https://www.brinknews.com/the-china-japan-economic-relationship-is-getting-stronger/>.
- White, Mark J. *Kennedy: The New Frontier Revisited*. Palgrave Macmillan Limited, 1998.
- W. H. M. "Economic Warfare with Japan or a New Treaty?" *Foreign Affairs* 18, no. 2 (1940): 366-67.
https://www.jstor.org/stable/20029006?seq=1#metadata_info_tab_contents.
- Wolfe, Robert. *Farm Wars: The Political Economy of Agriculture and the International Trade Regime*. Macmillan Press Ltd., 1997.
- World Trade Organization (WTO). "Article XXI: Security Expectations." https://www.wto.org/english/res_e/booksp_e/gatt_ai_e/art21_e.pdf.
- World Trade Organization (WTO). "The 128 countries that had signed GATT by 1994." https://www.wto.org/english/thewto_e/gattmem_e.htm.
- World Trade Organization (WTO). "Bananas discussions continue on a long-standing issue." 2005. https://www.wto.org/english/thewto_e/minist_e/min05_e/brief_e/brief22_e.htm.
- World Trade Organization (WTO). *World Trade Report 2008*. World Trade Organization, 2008. https://www.wto.org/english/res_e/booksp_e/anrep_e/world_trade_report08_e.pdf.
World Trade Organization (WTO). *World Trade Report 2018*. World Trade Organization, 2018. https://www.wto.org/english/res_e/publications_e/world_trade_report18_e.pdf.
- Yan, Jinglin. "A Study on U.S.-China Textile Trade Frictions: Economic Reasons and Policy Implications." *The International Economy* (1999): 25-41.
- Yergin, Daniel. *The Prize: The Epic Quest for Oil, Money & Power*. New York: Simon and Schuster, 2011.
- York, Erika. "Lessons from the 2002 Bush Steel Tariffs" *Tax Foundation*, March 12, 2018. <https://taxfoundation.org/lessons-2002-bush-steel-tariffs/>.

Zangl, Bernhard. "Judicialization Matters! A Comparison of Dispute Settlement under GATT and the WTO." *International Studies Quarterly* 52, no. 4 (December 2008): 825-854.