

Is it possible to deter economic coercion by punishment?
Arguments on the effectiveness of ACI

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A Thesis Submitted to the Graduate School of Public Policy
The University of Tokyo
In Partial Fulfillment of the Requirements for the Degree of
Master of Public Policy
December 08, 2023

Executive Summary

Given a series of economic coercions triggered by China, the necessity of deterring economic coercion has been voiced. It has been proposed that deterrence by denial, designed to reduce the perceived benefits by augmenting the cost of attack, would work as deterrence for economic coercion. It has, however, been pointed out that since denial would not inflict damage against an attack, it cannot prevent economic coercion from occurring. Anti-Coercion Instrument (hereafter ACI), discussed in the EU, is thus remarkable in aiming for deterrence by punishment. Although it is discernible from stakeholder meetings that private sectors in the EU have been concerned about reliance on the global supply chain, cost of full compliance, and the unclarified scope of ACI, ACI is a progressive approach and will be an important touchstone for other governments to see if deterrence by punishment against economic coercion really works.

In deterrence by punishment, credibility and unacceptable damage are two key elements to meet. It is plausible that relevant private sector companies would see a decline in their sales by implementing ACI, yet ACI does not stipulate financial compensation. Additionally, it can be deduced that the EU has lacked enforcement capability, which makes it uncertain if the private sector would comply with ACI in pursuit of profit maximisation. It is a fact that the United States United States was successful in letting China acquiesce to US's demand by threatening to impose tariffs, whereas the EU was incapable of deterring China from conducting economic sanctions towards Lithuania, which implies that EU's credibility towards China was insufficient to deter China.

As to unacceptable damage, according to an analysis of four cases, it can be concluded that China hardly paid costs for implementing economic sanctions, which could be interpreted that China is more risk-aversion-oriented than it has been assumed. It is, however, worth noting that there are some items that China excluded from sanction lists despite significant damage they would have imparted on target countries, which may be thought of as unacceptable damage or choke points for China. Based on this logic, one could specify aluminium, iron, and semiconductor as unacceptable damage for China. Nonetheless, as for the application to ACI, it is hard to ensure unacceptable damage because the EU cannot afford to produce minerals and China has now leveraged its economic power to catch up with production facilities by hiring engineers with high salary offers and economic espionage.

Given that the United States's threat with a 100 billion dollar tariff was successful and that the EU can hardly leverage the choke points, the EU needs to be prepared to exact tariffs at a scale similar to that of the United StatesUnited States. Yet, since the EU must tackle the free-rider issue and reach a consensus under a unanimous voting system, it can be predicted that it would be more difficult for the EU to demonstrate its political resolve than the United States United States.

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Acknowledgement

First, I would like to express special gratitude to Professor Kazuto SUZUKI, who supervised my thesis, notwithstanding his busy schedule. He graciously spared his precious time for my consultations. Without them, I am convinced I would not have completed this task. His remarks were and are invaluable and insightful, both for this thesis and my future career.

I wish to thank Dean Keisuke IIDA, who gave me insightful comments despite being a dean. His remarks served as a guideline for me to proceed with my thesis.

Lastly, I also would like to thank all of my colleagues, who encouraged me throughout this process; without their help and encouragement, I would not have been able to tackle this thesis.

Chapter 1 Introduction

1-1 Historical Overview of Economy in International Relations

The two greatest wars had unprecedentedly caused tens of millions of deaths across the globe. Regarding World War II, conventional weapons had been mainly employed, such as tanks and guns, but it is worth reminding ourselves that it was the first time that nuclear weapons were deployed, inflicting tens of thousands of deaths in Hiroshima and Nagasaki. The nuclear bombs deprived ordinary people's lives, devastating residential areas in which citizens went about their daily living.

After World War II, the international community has cooperated in controlling nuclear and conventional weapons within multinational frameworks, thus refraining itself from causing wars and employing weapons, in an aim to not repeat the damages.

It is within this context, in which the memory of dire damages and some of the damages themselves still remained, that no state has been willing to ignite a war. To put it another way, from monetary and normative points of view, the cost of war has been unaffordable for all states. This does not mean that the number of conflicts has decreased; rather, although rarely does it involve armed conflict, the forms of conflict have become inconspicuous, diversifying the manners in which they unfold, one of which is economic warfare.

Economic warfare is not new; it has a long history. It can be dated back to the ancient Greeks.¹ It is conceivable that throughout history, many dynasties expanded their power, exploring new markets, sometimes in a coercive manner. Qing dynasty in China, for example, laid down a tributary system in which China granted access to its market in return for tribute and knowledge delivered to the Chinese emperor.² Although this was not coercive, it was common amongst countries to leverage economic assets and exert influence on other countries.

During the greatest wars, economic assets were transformed into weapons that enabled to coerce other states. In the 1930s, for example, the United States conducted economic sanctions against Japan, cutting off Japan's access to the United States oil, as a means to halt Japan's invasion into other countries. Yet, this denial of access inevitably became a life and death situation for Japan, due to its high degree of dependence on the United States and the indispensability of oil, which

¹ David A. Baldwin, "Economic Statecraft," *Princeton University Press*, 2020, p.xi

² Matthew Reynolds and Matthew P. Goodman, "Deny, Defect, Deter, countering China's Economic Coercion," *Centre for Strategic of International Studies*, March, 2023, p. 7

forced Japan to explore new oil suppliers. As a result, Japan commenced the invasion of Indo-Pacific countries, in direct opposition to the United States's demand.

It therefore can be deduced that, although economic warfare does not tangibly materialise death like conventional warfare, it deprives states of diplomatic and economic freedom. In the case described above, Japan was deprived of freedom, which forced them to seek an alternative, which caused invasions. The suggestion is that economic warfare is never peaceful; rather, as demonstrated by the Japanese case, it is something to be tackled thoughtfully.

In addition, in the 1980s, there was a series of trade conflicts between Japan and the United States. The United States administration at the time claimed that Japan should reduce the bilateral trade deficit, given the increasing market share of Japanese automobiles in the United States. When negotiations commenced, the United States hardened its stance, demanding access to the Japanese market in several fields, such as financial services. Due to Japan's fear of deteriorating bilateral relations, Japan eventually acquiesced to the United States's demands.

Since the 1990s, accelerated by the birth of the Internet, the world has been more connected through globalisation, allowing us to grow economically through trade in cooperative and correlated manners, which created interdependence between countries. It is beneficial for countries to leverage foreign markets that are unbounded by their limited domestic demands. On the other hand, they become vulnerable to other countries because economy is not independent and is influenced by others' activities. Dependence may create choke points that allow other countries to use them to coerce other countries. In this context, economic coercion has been one of the most frequently used foreign relations tools as an alternative to the military.

1-2 Surrounding Challenges and Reality of Economic Coercion

Given the increasing importance of economic coercion, Reynolds and Goodman (2023) list examples of economic coercion by China as follows: Japanese fishing boat captain arrest (2010); Norwegian case in response to Liu Xiaobo Nobel Prize (2010); Philippine Scarborough shoal (2012); THAAD deployment in South Korea (2016); Mongolian case in response to Dalai Lama visit (2016); Australian case in response to calling for Covid-19 investigation (2020); Canadian case in response to Meng Wanzhou extradition (2018); and Lithuanian case (2021). All of the cases leveraged the respective country's economic dependence on China; particularly, in the Japanese fishing boat case, economic coercion succeeded in achieving China's demand to release the Chinese captain.

Despite these cases, the international community fell behind in regulating economic coercion. For example, it has been pointed out that the WTO is unable to tackle economic coercion. Cha (2023) is skeptical of the effectiveness of the WTO, when China can simply stop importing bananas from the Philippines or stop sending tour groups to Korea, citing the “will of the Chinese people.”³ The WTO could help in upholding norms and trade rules, but it is not intended to override national interests.

Given the gravity of cases such as those of Japan and Australia mentioned below, the international community has realised the imminent necessity to tackle this issue.

For example, in the 2022 Strategic Concept, NATO states “China challenges our [NATO] interests, security and values...it uses its economic leverage to create strategic dependencies and enhance its influence.”⁴ It can be interpreted that NATO regards economic coercion as a security issue that heretofore has been out of scope.

In addition to NATO, in the National Security Strategy of Japan published in December 2022, it is stated that “the international community is facing changes... and globalisation and interdependence alone cannot serve as a guarantor for peace and development across the globe.”⁵ It is remarkable to state that interdependence cannot guarantee peace and development, contrary to common belief. It indicates that the importance of the economy in national security has increased because the scope of national security has expanded to include those fields previously considered non-military, such as economic, technological, and others, and thus the boundary between military and non-military fields is no longer clear-cut.⁶ This virtually echoes NATO’s strategic concept.

The document also states that China is taking advantage of other countries' dependence on China to exert economic pressure on other countries⁷ and represents an unprecedented and the greatest strategic challenge in ensuring the peace and security of Japan and the peace and stability of the international community.⁸ However, regarding concrete measures for economic coercion, it only states that [Japan] will promote effective efforts against economic coercion by foreign countries⁹ without mentioning what the specific efforts and measures would be.

The G7 Hiroshima summit in 2023 was remarkable in mentioning deterrence of economic coercion.

³ Victor Cha, “How to Stop Chinese Coercion: The Case for Collective Resilience,” *Foreign Affairs*, Vol. 102 Issue 1(Jan/Feb2023), p. 90

⁴ NATO, “Strategic Concept,” June 29, 2022, p.5

⁵ “National Security Strategy of Japan,” *the Cabinet Secretariat of Japan*, December, 2022, p. 1

⁶ *Ibid*, p2

⁷ *Ibid*, p. 5

⁸ *Ibid*, p.9

⁹ *Ibid*, p.31

In the Joint Statement, it was proposed to establish a platform for economic coercion, stating that they will deepen their strategic dialogue against malicious practices to protect global supply chains from illegitimate influence, espionage, illicit knowledge leakage, and sabotage in the digital sphere.¹⁰

While the imminent necessity to tackle economic coercion has been voiced in the international community, the manners in which it should be deterred have not yet been determined. Moreover, it is a fact that few governments are currently tackling economic coercion. In the United States United States, for example, the Countering Economic Coercion Act has been discussed. Yet, even if some retaliatory measures have been proposed, such as increasing duties on imports from the coercing entities, it is mainly designed as a means of cooperating with allies to mitigate damages incurred by economic coercion.¹¹ This could be understood as a message that the United States United States would mitigate damages caused by economic coercion, but the United States United States would be helpless in preventing economic coercion itself from occurring.

Similar to the United States, Japan enacted the Economic Security Promotion Act in 2022, consisting of four main pillars: Framework for Ensuring a Stable Supply of Key Products; System on Ensuring the Stable Provision of Essential Infrastructure Services; Framework for Enhancing the Development of Advanced Critical Technologies; and Non-Disclosure of Selected Patent Applications.¹² It is obvious that these four pillars were designed to defend key products and their supply chains and to develop advanced technologies, which again are not intended as counteractions. Therefore, Japan and the United States have tackled legislation against economic coercion, but it remains uncertain whether it would help prevent economic coercion from occurring.

As is stated in the Joint Statement of Hiroshima Summit, it is imperative to deter economic coercion, but it is safe to say that no country has ever completely succeeded in deterrence in the process of enactment. In arguing for deterrence, it is necessary to mention both that by denial and by punishment. As will be discussed, deterrence by denial is easier to implement because it does not entail retaliatory measures, unlike that by punishment. The United States and Japan mainly seek deterrence by denial. Deterrence by punishment, which is what the EU envisages, is hard to attain, but is expected to be more effective than denial in defeating an attacker's will to attack. In order to evaluate the remarkable

¹⁰ "G7 Hiroshima Leaders' Communiqué," G7 Hiroshima 2023, May 20, 2023, https://www.g7hiroshima.go.jp/documents/pdf/Leaders_Communique_01_en.pdf.

¹¹ See the Section 2 (6) of Countering Economic Coercion Act, <https://www.young.senate.gov/imo/media/doc/Economic%20Coercion%202023.pdf>.

¹² "Summary of Economic Security Promotion Act," *the Cabinet Secretariat of Japan*, access granted on October 10, 2023, https://www.cao.go.jp/keizai_anzen_hosho/doc/gaiyo.pdf. (in Japanese)

characteristics of Anti Coercion Instrument, it is necessary to understand the pros and cons of both denial and punishment.

1-2-1 Deterrence by Denial

Based on the aforementioned two acts, it can be predicted that the manner in which states will enact deterrence would be through denial, by reducing the perceived benefit by raising the cost of attack. Reynolds and Goodman (2023) argue for the superiority of deterrence by denial over that by punishment. First, deterrence by denial allows the defender to act first. This would eliminate an advantage of the attacker. Second, it does not bring damage to consumers and corporations, unlike deterrence by punishment. Third, it is worth mentioning that economic coercion contains informalities that are not necessarily based on a legal framework. If the United States enacts a regulation to define and tackle economic coercion, it is possible that a coercing country would employ informality and provoke economic coercion while circumventing the definition. In deterrence by denial, it is not necessary to define economic coercion, which makes it possible to tackle such circumvention.

Furthermore, Reynolds and Goodman (2023) allege the negative effect of deterrence by punishment. They point out that escalation by means of punishment would work only when retaliatory measures are proportionate to the facing threat. If the threat [of the retaliatory measures] is too extreme relative to the action being deterred, the target will dismiss it as unrealistic¹³, failing as deterrence. In deterrence of economic coercion, it is difficult to determine what are proportionate retaliatory measures. Additionally, Reynolds and Goodman (2023) point out that even if the threat of retaliation were limited to a proportional response, it is still unclear if the United States would be willing to follow through¹⁴ vis-à-vis grounds for justification. During the trade war, the United States justified punitive measures on the grounds of “direct threats” to the United States national and economic security. It remains unclear in its definition of the scope of national security and collective defence, as the Countering Economic Coercion Act intends, it is questionable whether the United States would take action for the sake of other like-minded allies. Furthermore, Reynolds and Goodman (2023) question whether targets would acquiesce to perceived cost and change their behaviour. Conversely, retaliatory measures might let the target legitimise their coercion, which is a counterproductive consequence.

1-2-2 Deterrence by Punishment

As mentioned above, deterrence for economic coercion by punishment contains some difficulties, such

¹³ Matthew Reynolds and Matthew P. Goodman, “Deny, Defect, Deter, countering China’s Economic Coercion,” *Centre for Strategic of International Studies*, March, 2023, p. 31

¹⁴ Ibid.

as the escalation ladder, plausibility, and proportionality. Meanwhile, deterrence by denial is more plausible in the sense that it does not entail a clear definition and retaliatory (and proportionate) measures, and that it is designed to lower the possibility of success, not to prevent economic coercion itself from occurring. This suggests that even if it is unlikely to succeed, a state might implement economic coercion, with signalling being the aim, unless unacceptable damage is inflicted. In this situation, deterrence by denial would not work.

Along this line of thought, although it is difficult to achieve, the necessity of deterrence by punishment has been discussed. For example, Cha (2023) argues that friend shoring and reshoring do nothing to deter China from employing economic coercion. These measures would work only if complemented by strategies for disrupting Chinese behaviour. Cha (2023) also argues that China would not cease coercion unless they are forced. This suggests a plausible scenario in which deterrence by denial does not work, because it only lowers the possibility of success, rather than forcing them to cease coercion.

Instead of friend shoring, Cha (2023) proposes a strategy of “flipping the script” in order to deter and counter economic coercions collectively, the intention being to cover each country's vulnerabilities and to increase trade share with China, including critical items, such as iron and semiconductors. This is a proportionate measure which can inflict damage against an attacker to deter the initial attack.

Frederick and Shatz (2022), on the other hand, propose that the United States should help establish a multilateral mechanism through informal consultations, an existing body, or the creation of a new entity consisting of willing partners to monitor and respond to Chinese economic pressure that undermines the operations and values of the international, rule-based system,¹⁵ the efforts of which would be the following: publicly denounce China's actions and call for an end to such behaviour; retaliate economically against China; and support the victim through economic assistance. Retaliation measures would be designed to take a group of actions similar to those taken by China, or a package of options that would cost China as much as it costs the target country, which is similar to what Cha (2023) suggests.

In order to resist economic coercion from China and mitigate the pressure, Glasser (2021) proposes creating a coalition composed of countries subject to Chinese economic coercion, whose aim consists of the following four points: condemning Chinese economic coercion; encouraging victims of economic coercion to challenge Chinese measures in the WTO; punishing China by imposing punitive retaliatory tariffs; and offsetting assistance to compensate countries and companies for their losses

¹⁵ Bryan Frederick and Howard J. Shatz, “Countering Chinese Coercion,” *Rand Corporation*, December 2022, p.3

caused by the Chinese. Particularly, Glasser (2021) proposes an idea in which coalition members would each identify one product they export to China that Beijing is heavily reliant on and impose a small levy on that product. The extra amount that China would be forced to pay for those products would be calculated so as to be proportionate to the damages incurred from China's coercion.¹⁶ It is obvious that Glasser's (2021) proposal contains both the concepts of deterrence by denial and by punishment. The proposed tariff measure is designed to inflict damage and to deter by punishment.

Furthermore, given the increasing trend of economic coercion by China, Cooper (2021) proposes considering three options to tackle it: defence through active diversification; deterrence through strategic recoupling; and countering through collective action. According to the third option, the United States would need to work with their allies against economic coercion, penalising China when it engages in economic coercion against countries, companies, and individuals.¹⁷

1-3 Research Scope and Structure

Given the context in which other states have tackled economic coercion with deterrence by denial, but deterrence by punishment has been discussed in order to prevent economic coercion from occurring, it is worth noting that the EU has considered ACI, which is designed for deterring economic coercion by retaliatory measures.

It is remarkable and audacious that deterrence by punishment with respect to economic coercion is being discussed, in the sense that no government has ever fully achieved it. ACI is thus a progressive approach and will be an important touchstone for other governments to see if deterrence by punishment against economic coercion really works, overcoming the difficulties mentioned below, such as the escalation ladder and proportionality.

The structure of this paper is as follows: Chapter 2 discusses the theoretical framework of economic coercion and empirical studies to clarify the scope of the research and to introduce a framework to explain the effectiveness of economic coercion; Chapter 3 introduces the ACI and debates the credibility of the EU towards China, which is one of the main conditions in which deterrence would work, as stated by Morgan (2003); Chapter 4 discusses what is unacceptable damage for China,

¹⁶ Bonnie S. Glasser, "Time for Collective Pushback against China's Economic Coercion," *Centre for Strategic of International Studies*, January 13, 2021

¹⁷ Zack Cooper, "Between Beijing and a Hard Place: Responding to China's Economic Coercion," German Marshall Fund, December 7, 2021, access granted on October 14, 2023, <https://securingdemocracy.gmfus.org/zack-cooper-testifies-before-the-congressional-executive-commission-on-china-on-chinas-economic-coercion/>.

analysing past cases of China's economic coercion, and specifying choke points and their applicability to ACI; Chapter 5 outlines uncovered topics, such as lithium, and some discussions relating to deterrence such as extended deterrence. The chapter also states the conclusion, discussing whether the ACI would work, and, if yes, under what conditions it would.

It is worth mentioning that ACI is not intended to specify the attacker. It is a fact that the EU has been coerced by China, the United States, and Russia. ACI is thus designed to deter attackers in general. However, given the number of economic coercions conducted by China as well as their significance not only for the EU but also for the entire world, it seems reasonable to confine the research scope to China.

Chapter 2 Literature Review

2-1 Definition of Economic Coercion

After WWII the international community came to loathe military conflicts on a massive scale, being reminded of the damages. Even though production cost of military equipment has declined thanks to technological progress, the implementation cost has increased due to societal norms, as Baldwin (2020) points out. In this context, economic leverage is being employed more than ever as a means to avoid armed conflict.

Hirschman (1980) is one of the prominent pioneers in the study of relationships between national interests and economic coercive power, describing national power as the power of coercion that one nation may bring to bear upon other nations, the method of coercion being military or “peaceful.”¹⁸

Hirschman (1980) argues for the importance of foreign trade, which can exert influence on other countries. He argues that foreign trade has two main effects; *supply effect*, which is designed to enhance the potential military force of a country¹⁹ by supplying superior goods; and *influence effect*, in which foreign trade would provide a method of coercion of its own in relations between sovereign nations²⁰. The influence effect presupposes a situation where country A maintains advantages towards other trading partner countries B, C, etc., so that they would do anything in order to retain foreign trade with A.²¹

Hirschman (1980) was able to conceptualise incorporating economic coercive power into international relations, which has been foundational in this field. It is, however, clear that foreign trade is not the only way to economically exert influence on other countries; expulsion from international frameworks, such as the SWIFT case with Russia, and control of technology transfer are other possible methods. Hirschman (1980) had failed to grasp these other methods, which have often been employed in recent international relations.

In developing a basic theory of economic coercive power, Baldwin (2020) introduces the concept of *economic statecraft*. According to his definition, economic statecraft as governmental influence

¹⁸ Albert O. Hirschman, “National Power and the Structure of Foreign Trade,” *University of California Press*, 1980, p.13

¹⁹ Ibid, p.14

²⁰ Ibid, p.15

²¹ Ibid, p.17

attempts to rely primarily on resources that have a reasonable semblance of a market price in terms of money.²² As Baldwin (2020) acknowledges, economic statecraft focuses on means rather than ends. Furthermore, the concept of economic statecraft is broad, including economic sanctions and economic inducement in a single concept. Without a doubt, economic statecraft has been more frequently employed than before, yet outcomes forced by other countries cannot be explained.

In exerting economic influence on others, it is important to determine whether it actually would be effective and can obtain acquiescence from the target. In order to tackle this problem, Drezner (2003) developed the concept of economic coercion. Drezner (2003) defines economic coercion as *the threat or act by a sender government or governments to disrupt economic exchange with the target state, unless the target acquiesces to an articulated demand*.²³ This definition in particular suggests two points. First, it assumes that the demand is articulated. However, as Drezner (2003) himself states, threats are made behind closed doors,²⁴ so it is hard to observe an articulated demand per this definition. Second, it assumes that the range of manners in which economic coercions are conducted is broad, described as “economic exchange”. In the contemporary world, almost anything can be regarded as an economic exchange. This language essentially means that almost everything could be employed as a tool of economic coercion.

The European Commission (2021), on the one hand, refers to economic coercion as *a situation where a third country is seeking to pressure the Union or a Member State into making a particular policy choice by applying, or threatening to apply, measures affecting trade or investment against the Union or a Member State*.²⁵ In contrast to Drezner’s (2003) definition, the demand by the sanctioning state is not articulated; additionally, the manners of economic coercion are relatively narrowed to investment or trade measures. Yet, as mentioned below, economic coercions are not limited to such measures. Rather, almost all economic exchanges can be employed as economic coercion.

Based on the two definitions, Drezner’s (2003) definition could be more comprehensively rewritten to be more realistic: *the threat or act by a sender government or governments to disrupt economic exchange with the target state, unless the target acquiesces to a particular policy choice*. In this paper, economic coercion is defined as above.

²² David A. Baldwin, “Economic Statecraft,” *Princeton University Press*, 2020, p. 29

²³ Daniel W. Drezner, “The Hidden Hand of Economic Coercion,” *International Organization*, Vol. 57, No. 3, 2003, p. 643

²⁴ Ibid, p. 644

²⁵ European Commission, 2021/0406 (COD), December 8, 2021, p.1

2-2 Game Theoretic Model and a Developed Model

In game theoretic model, the following two points are assumed. First, the sanctioning state and the target are treated as rational unitary actors that share a common prediction.²⁶ Rationality grants actors to behave based on pure cost/benefit calculus. As actors are unitary, it is the state that will make a decision whether the state coerces or acquiesces to another state. Second, this model assumes full information and divisible demands. This assumption allows actors to obtain all the information and take it into account when calculating cost/benefit.

According to this model, the following two scenarios are possible; a coercer declines to impose economic sanctions based on a calculation of cost/benefit of the coercion for both the sender and the target. If the cost of coercion outweighs the benefits, the coercer can realise that it is not worth imposing the coercion before actually doing so; or, an agreement is reached before sanctions are actually imposed. By the same logic, if the cost of economic sanctions for the target outweighs the benefits, the target can realise it is logical to acquiesce to the coercer's demand, for the sake of utility maximisation for the target. The target thus acquiesces before sanctions materialise.

Interestingly, the two above-mentioned outcomes in this model suggest that economic sanctions are never materialised because both the sender and target can decide to take action before sanctions are materialised. Yet, as Drezner (2003) states, this model does not reflect the reality of current international relations, given the increasing number of economic sanctions, such as China's economic sanction towards Australia in 2020.

Drezner (1999) developed a similar game theoretic model, adding two assumptions. First, states care about reputational risk, where current concessions would influence future security. States would be more vulnerable to future coercions if they make concessions now, a point Drezner articulates using the concept of "*the shadow of future*". In ACI, if a small country in the EU is coerced and the EU were incapable of retaliating, it is likely that the small country would be targeted thenceforth. The assumption captures this point. Second, naturally, states prefer to have a reputation of being resilient to coercion. For this reason, they tend to endure coercion for as long as they can. In the Lithuanian case, for example, Lithuania resisted as long as it could, not as a result of a cost/benefit calculation, but the desire to have a reputation of being tough.

In this model, a coercer would first choose from two outcomes: the status quo, which indicates zero

²⁶ Daniel W. Drezner, "The Hidden Hand of Economic Coercion," *International Organization*, Vol. 57, No. 3, 2003, p. 645

utility because the coercer does nothing; and deadlock, which means that the target withstands coercion after being imposed sanctions, because it is difficult for economic sanctions to succeed against a target having a reputation of being tough. In the deadlock situation, the coercer would bear the cost of imposing sanctions. If the expected utility of a deadlock outweighs that of the status quo, i.e., zero, the coercer would impose sanctions. Drezner (1999) calls this situation the “coercion condition”.²⁷ It would be difficult for this condition to be met when expectations of conflict are low (such as with allies), whereas when expectations of conflict are high (such as with adversaries), the condition will be met. This reflects the reputational risk that concessions made by the coercer to not impose sanctions would affect the sanctioning state’s reputational value.

Next, the target decides whether it acquiesces or remains in a deadlock. If the target acquiesces, its utility will be diminished by accepting the coercer’s demand. On the other hand, the target would be burdened with the cost of economic sanctions if it remains in a deadlock. Therefore, if the expected utility of acquiescence for the target outweighs that of deadlock, the target would acquiesce. Drezner (1999) calls this situation “concession function”.²⁸ This function indicates that if expectations of conflict are low, the expected utility of acquiescence outweighs the loss that would be incurred by accepting the coercer’s demand, thus acquiescence would be easier to swallow, whereas, when expectations of conflict are high, the target would prefer to endure the coercion.

Yet, this model is still difficult to tackle, because this model relies on the full information assumption. It has been said that one cannot be sure about the other’s preference. For example, given a series of economic sanctions by China, one might think that China prioritises political issues over the economy. Yet, no one knows how much China prioritises it and to what extent China can abandon its economic benefits. Because of this difficulty, Lacy and Niou (2004) developed the game theoretic model, adding two assumptions. First, each side has a different preference with respect to the outcome. Unlike the game theoretic model that assumes complete information, they suggest incorporating values or mindsets held by each country. This assumes that China may not behave based on cost/benefit calculation, pursuing political achievements, while it may be possible that some EU countries would seek economic benefit rather than political achievement. Second, each side is uncertain of the other’s preference. This assumption prevents a coercer from taking the other’s preference into account when deciding its strategy. In ACI, this reflects the fact that the EU is uncertain to what extent China prioritises political goals over economic benefits, and vice versa.

²⁷ Daniel Drezner, “The Sanctions Paradox -Economic Statecraft and International Relations,” *Cambridge University Press*, 1999, p.40

²⁸ Ibid, p.43

In Lacy and Niou's model, two types of coercers and targets are respectively assumed. As for coercers, there are "resolute" and "irresolute" ones. The former is described as one who prefers to incur the cost of sanctions if the target does not comply with the coercer's original demand.²⁹ The latter is described as one who prefers not to impose economic sanctions regardless of whether the target complies.³⁰ As for targets, there also are two types, which are "resilient" and "compliant" ones. The former is stated as ones who would prefer to suffer sanctions without complying with them or capitulating to the coercer's demand.³¹ The latter is described as ones who would rather concede on issue X than suffer economic sanctions.³² The authors stress that this model is not determined by power or capability, but rather is based on incomplete information regarding a player's type, namely the lack of information about its preferences.³³

Based on the assumptions stated above, coercers would coerce in order to increase their utility more than the with the status quo. The target would comply if the utility after the coercion would be lower than the status quo. Additionally, it is theoretically deduced that a compliant target would rather concede on a disputed issue and not suffer sanctions than not to concede and suffer sanctions.³⁴ A resilient target, on the other hand, prefers to suffer sanctions and not back down on the disputed issue over avoiding sanctions by backing down.³⁵

Theoretically, the following outcomes could be conceived: the coercer does not threaten sanctions under the conditions that the coercer is irresolute, the cost of backing down is high, and the value of the target's compliance is not much greater than that of maintaining the status quo.³⁶ Since an economic sanction is not materialised, the type of target does not matter; the coercer threatens economic sanctions, the target complies with conditions in which the target is compliant, the cost of compliance is low, and the cost of sanctions is high.³⁷ In this case, compliance is accomplished without economic sanctions being actualised; the coercer threatens economic sanctions, the target does not comply, the coercer imposes sanctions, the target does not capitulate under the conditions that the coercer is resolute and the target is resilient³⁸; the coercer threatens economic sanctions, the target does not comply, the coercer imposes sanctions, the target capitulates under the conditions that the

²⁹ Dean Lacy and Emerson M. S. Niou, "A Theory of Economic Sanctions and Issue Linkage: The Roles of Preferences, Information, and Threats," *The Journal of Politics*, Vol. 66, No. 1, 2004, p. 31.

³⁰ Ibid.

³¹ Ibid, p. 30.

³² Ibid.

³³ Ibid, p. 32.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid, p. 35.

³⁷ Ibid, p. 36

³⁸ Ibid.

target believes the coercer is irresolute and the value of not complying without being sanctioned is high³⁹; and the coercer threatens economic sanctions, the target does not comply, the coercer does not impose sanctions under the conditions that the target is resilient and the coercer is irresolute. Additionally, the coercer believes that the target is likely to be compliant, the cost of backing down is low, and the value of the target complying is much greater than maintaining the status quo.⁴⁰

As Lacy and Niou mention, it is worth noting that these outcomes depend on the lack of knowledge about the other's preferences, according to the assumption. For example, in the fourth case, if the target correctly understands the coercer's preference, the target would know that the coercer is resolute from the outset and it is likely that economic sanctions would be imposed accordingly after threatening, and the target would capitulate from the beginning before economic sanctions are imposed, based on the logic described above.

However, both models suggested by Drezner (1999) and Lacy and Niou (2004) presuppose that the cost of economic sanctions is fixed and that it can be mitigated through alternative trade, which depends on the target's capabilities and relations with other countries. For instance, Russia and North Korea have been sanctioned by the international community, which inflicts massive costs on each country. In order to mitigate the cost, it has been reported that North Korea smuggles weapons to Russia⁴¹ as a way of circumventing economic sanctions and leveraging relations with Russia. It is true that the international community (coercer) has not ceased imposing economic sanctions and Russia and North Korea (targets) have not capitulated, which suggests that both the coercer and the targets are resolute. However, had it not been for the target's capability to circumvent economic sanctions, the outcome might have been different regardless of the target type.

The two theories described above explain the expected outcomes, yet they fail to explain if economic sanctions would really work and what would be the determinant factors of success in economic sanctions. Answering these questions will require the support of empirical studies.

2-3 Literature on Economic Sanctions & Coercion

Hufbauer et al. (2009)'s research is considered to be foundational to empirical research on economic sanctions and has been often referred to as constituting basic knowledge of economic sanctions.

³⁹ Ibid, p.37

⁴⁰ Ibid, p.38

⁴¹ Ali Harb, "US has little leverage against Russia-North Korea cooperation, experts say," *Aljazeera*, September 13, 2023, <https://www.aljazeera.com/news/2023/9/13/us-has-little-leverage-against-russia-north-korea-cooperation-experts-say>.

Hufbauer et al. (2009) analyse 174 cases of 204 episodes with 14 variables, which helps to establish a broader and comprehensive understanding of economic sanctions.

It is obvious that the success of economic sanctions depends on the policy goals set by the sanctioning state. In order to overcome this issue, Hufbauer et al. (2009) classify the goals into five categories: change the target-country policies in a relatively modest and limited way; change the target country's regime; dispute a military venture; impair the target country's military potential; and change the target-country policies in another major way.

As an overall conclusion, the success rate of all types of economic sanctions is 34%, which consists of the followings: rate of success in modest policy change is 51% (n=43); in regime change is 31% (n=80); in disruption of military ventures is 21% (n=19); in military impairment is 31% (n=29); and in other major policy changes is 30% (n=33). This result suggests that half of the economic sanctions for modest policy change could be successful, while only 21% of disruption of military ventures succeed.

With respect to a regression analysis of each variable without adjusting the region and interaction of variables, variables for costs incurred by the target and the type of regime of the target are significant for policy result, sanction contribution, and success rate. A variable for the volume of trade between the target and the sanctioning state and a binomial variable for post-cold war are significant for calculating policy results, whereas that for relations between the two countries, for the relative economic sizes of the two countries, and a binomial variable for post-cold war are insignificant for calculating the success rate.

Though Hufbauer et al. (2009)'s research is comprehensive and foundational on economic sanctions, there are points that could be debated. First, it is difficult to define "success" of economic sanctions. In this analysis, success is defined as a score above 9 points in *success score index*, with a scale from 0 to 16, obtained by multiplying *policy result index* (0 to 4) by *sanction contribution index* (0 to 4). In the former index, each point is defined as follows: 1= failed outcome; 2= unclear but possibly positive outcome; 3= positive outcome; and 4= successful outcome, while the latter is defined as follows: 1= negative contribution; 2= minor contribution; 3= substantial contribution; and 4= decisive contribution. In this qualitative scoring, each score depends on one's subjective interpretation, which could, for example, remain ambiguous between "possibly" a positive outcome and a positive outcome. The threshold between 2 and 3 of course affects the success score index, which is defined as unsuccessful when below 8.

In addition to qualitative scoring, the timeframe for judging success is hard to define. For example, Japan acquiesced to China's economic coercion in the following months, whereas the UK, specifically David Cameron, declared Tibet to be an inalienable sovereignty of China almost one year after China's retaliatory measure. Furthermore, it is possible that a sanctioning state abandons the sanction several years later, such as was the case in China's economic coercion towards Australia in 2021. These cases illustrate that success may differ at a given timeframe, such that an unsuccessful economic sanction at one point may become successful several years later.

Pape (1997) provides a counterargument to Hufbauer et al. (2009)'s research as to why economic sanctions do not work as anticipated. Pape (1997) casts doubt on whether the scale of economic damage of the target correlates with the success rate of economic sanctions, utilising the database compiled by Hufbauer et al. (2009).

Pape (1997) states that in the "defined" high economic impact category the success rate is 25%, whereas in the low category the rate is 6%, which seems to suggest that the success rate is correlated with economic impact. Pape (1997), however, points out the following two points: in Ordinary Least Squares, the correlation between financial damage and success rate is not statistically significant; and the boundary between high and low is suspicious. In Hufbauer et al. (2009)'s analysis, loss of GNP due to economic sanctions of 4.6% is the threshold between "high" and "low" financial damage. If the boundary between low and high categories were moved from just 4.6 to 5.2 percent, the high category would contain no successes at all.⁴²

Rather than focusing on the degree of economic damage caused by economic sanctions, Pape (1997) focuses on the target of economic sanctions, arguing that economic sanctions should not be regarded as a military force with challenges, one of which is that modern states are not fragile, but rather are capable of withstanding economic sanctions. This implies that rally-round-the-flag effect would work with the weakest state, which makes success difficult for economic sanctions.

Additionally, Pape (1997) points out that modern states can make adjustments to minimise their vulnerability to economic sanctions, since administrative capabilities allow states to mitigate the economic damage of sanctions through substitution and other techniques.⁴³ For example, Japan enacted the Economic Security Promotion Act in 2022, the aim being to support critical infrastructure and sectors. Big states like Japan and China can afford subsidies to adjust the damage caused by economic sanctions. Corresponding with what Pape (1997) argues on the national legitimacy of states,

⁴² Ibid, p.108

⁴³ Ibid, p.107

Barros and Sikora (2022) argue that economic sanctions against Lithuania yielded the opposite effect of what China had anticipated. Even though President Nausėda stated that the establishment of a representative office in Vilnius was a mistake, Lithuania has been successful in strengthening economic ties with Indo-Pacific countries; according to Foreign Minister Landsbergis, products originating from Lithuania across the Indo-Pacific “more than four times exceeded the volume of exports to China in the first half of 2021.”⁴⁴ Barros and Sikora (2022) argue that the reason for the bilateral relations with Taiwan is that the controversy brought both parties closer and served as a catalyst for deeper cooperation in a multitude of areas.⁴⁵ Since there have been no compensation mechanisms for the private sector or concrete measures, political resolve can be regarded as a driver to deepen relations. Conversely, political resolve would also work as a driver for sanctioning states.

Lim and Ferguson (2022), on the other hand, argue that there are two complexities of economic sanctions as well as coercions. First, a sanctioning state would want to maintain the deniability of implementing economic sanctions that may run counter to international rules, which incentivises it to carry out a sanction informally. This informality prevents a sanctioned state from responding due to a policy framework, which is *regulatory availability*. Second, for the sanctioning state, informality leads to *opportunism* of the domestic private sector, which does not necessarily follow what the government intends. Due to this informality, the state cannot force the domestic private sector to cease transactions with the target state, which dampen the effect of economic sanctions as well as coercions.

Suzuki (2023) suggests several conditions under which economic statecraft would be successful, one of which is vulnerability; if state A depends highly on state B, for example, it can be said that the state A is vulnerable to state B. In this situation, economic sanctions implemented by state B is likely to succeed by leveraging the vulnerability. This can be demonstrated with examples. For example, in China’s economic coercion against Japan in 2010, the scale was not massive but rather limited. Yet, China threatened to suspend exportation of rare-earth materials which were indispensable for Japanese manufactures. Thus, China was successful in leveraging Japan’s vulnerability, whereas for Japan, its “choke point” was threatened, which drove Japan to acquiesce to China’s demand.

Based on the literature described above, it can be said that economic damage on the target is irrelevant to the success of economic sanctions. Even though Hufbauer et al. (2009) argued that economic damage on the target is a significant component in regression analysis, the scope of their research fails to cover mitigating effects of alternative trading partners.

⁴⁴ Bryce Barros and Krystyna Sikora, “China’s sanctions regime and Lithuania: Policy responses for European institutions,” Hinrich Foundation, August, 2022, p.12

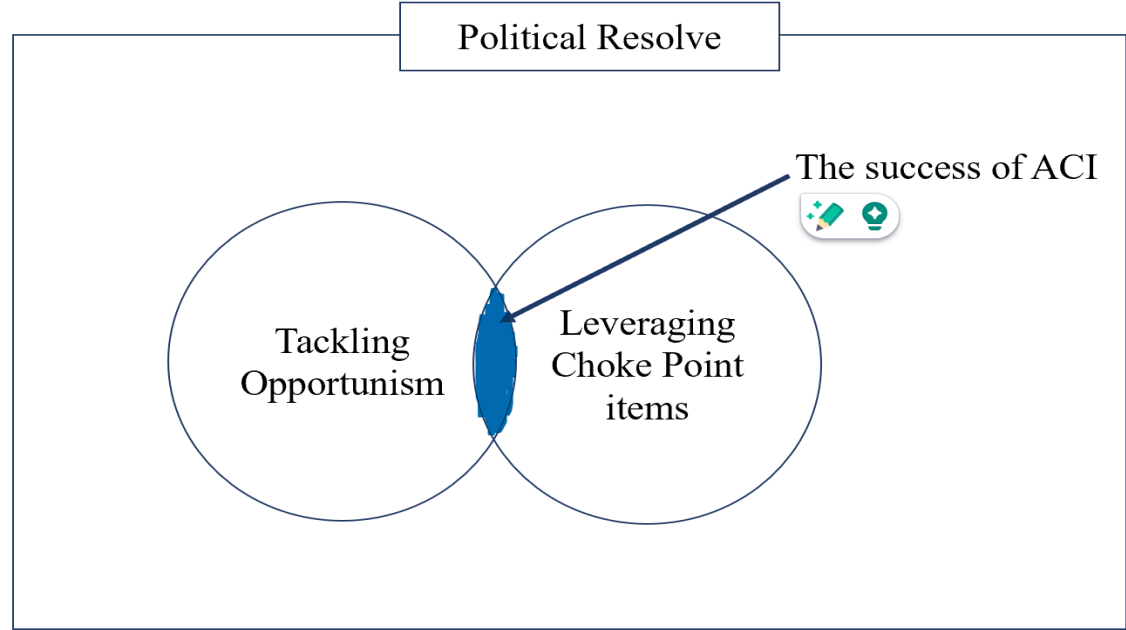
⁴⁵ Ibid, p.12

Pape (1997) and Barros and Sikora (2022) assert the importance of political resolve. As they argue, Lithuania was successful in expanding economic ties with Indo-Pacific countries even under economic sanctions. This political resolve would contribute to resilience against economic from China as well as act as a driver for sanctioning states. Given the fact that it is impossible to tackle economic coercion without political resolve, political resolve would affect every aspect of economic sanctions. Therefore, it is predicted that in ACI how to obtain political support from each member state is important in order to deter economic coercion.

More importantly, ACI is designed to deter economic coercion by punishment, which suggests whether retaliatory measures from the EU would be effective is important. Even though the EU can be exempted from regulatory availability, as Lim and Ferguson (2022) argue, opportunism could be an issue for the EU. In order to prevent it, the capability of the EU to implement ACI and force the private sector to comply with it becomes critical; however, as will be argued in the following chapters, this implementation capability is hard to attain.

Moreover, as Suzuki (2023) points out, it is imperative to leverage choke points for the success of economic statecraft. In the following chapters, I describe the basic structure of ACI and discuss whether it is possible to deter economic coercion with retaliatory measures from the viewpoint of credibility and unacceptable damage.

Fig.0 Image of success of ACI



Chapter 3 ACI and Credibility

3-1-1 Basic Information

As mentioned above, it is clear that the EU has been concerned about economic coercion. For example, China has suspended import of beef from Lithuania, in retaliation to the fact that the embassy in Lithuania bears the name Taiwan rather than "Chinese Taipei", a name used by many nations to avoid offending China.⁴⁶ This will of course undermine the national interest for Lithuania as well as the entire EU. Nonetheless, the EU has failed to take a concrete action that forces China to end the retaliatory measure. It is worth noting that the EU currently does not have a legal basis for tackling economic coercion. Even though the EU has already enacted the Blocking Statute, which was designed to protect countries damaged by extraterritorial sanctions, it does not cover economic coercion. It has been suggested that the Blocking Statute has been unsuccessful in protecting EU companies subject to extraterritorial economic sanctions by third countries.⁴⁷ The discrepancy between reality and the lack of a legal basis has led to inaction, leaving the situation unchanged.

In this context, it becomes necessary to transform the Blocking Statute into something more effective and thus the necessity for ACI has been voiced. The aim of ACI is to protect the interests of the Union and its Member States by enabling the Union to respond to economic coercion.⁴⁸

ACI is in the process of legislation and has not yet been enacted. On December 8, 2021, a legislative proposal was published by the European Commission. On March 28, 2023, the European Council and the European Parliament reached a provisional agreement on ACI. As of September 31, 2023, ACI has not been enacted and is awaiting the Parliament's position on 1st reading.

ACI consists of 17 articles. In Article I-1 stipulates a framework for the Union to respond in situations of coercion, the objective being deterrence, or to pressure the third country to desist from such actions

⁴⁶ "China halts Lithuania beef, dairy and beer imports amid Taiwan row," *BBC News*, February 11, 2022, <https://www.bbc.com/news/business-60343316>.

⁴⁷ "SUMMARY OF RESULTS OF THE OPEN PUBLIC CONSULTATION on the review of the Blocking Statute," European Commission, December 2021, https://finance.ec.europa.eu/system/files/2021-12/2021-blocking-statute-review-summary-of-responses_en.pdf.

⁴⁸ European Commission, 2021/0406 (COD), December 8, 2021, p. 1

[coercing measures], whilst permitting the Union, in the last resort, to counteract such actions.⁴⁹

This is the main objective of ACI, with the emphasis that ACI is designed for deterring economic coercion as a means of counteraction, rather than mitigating damage. Other laws related to economic security are not designed as deterrence against economic coercion. For instance, Japan enacted the Economic Security Promotion Act in 2022, which consists of four pillars. Although it stipulates a stable supply of key products and infrastructure, the language of “deterrence” is never used. Given the increasing importance of deterrence against economic coercion, it is safe to say that the aim of ACI is prominent and audacious.

However, as mentioned, since a counteraction is the “last resort”, Article IV stipulates that the European Commission shall notify the third country concerning its decision and request it to cease the economic coercion and, where appropriate, repair the injury suffered by the Union or its Member States.⁵⁰ Furthermore, Article V also stipulates that the Commission shall be open to engage on behalf of the Union with the relevant third country, to explore options with a view to achieving cessation of the economic coercion...shall remain open to engage with the third country concerned after the adoption of Union response measures.⁵¹ Judging from Articles IV and V, it is obvious that the EU would first attempt to persuade the third party to cease economic coercion; upon failure, it would continue to engage even after the implementation of response measures.

Concrete measures of implementation are proposed in Annex 1.⁵² They consist of 11 measures and mainly propose restrictions on trade ((a),(b),(c),(e)). Remarkably, restrictions on access to the financial market, including banking and insurance, are stipulated ((i)). This implies that the EU might leverage their financial market for deterrence and the financial sector might be sacrificed for the sake of other sectors subjected to coercion. Restrictions on registrations and authorisations are also suggested ((j), (k)). Without registrations and authorisations, some specific companies would not be able to do business in the EU, such as medical goods manufacturers.

As mentioned above, while the specific measures have not yet been finalized, they are designed to cover trade restrictions as well as registrations that matter for daily business. Trade restrictions would inevitably affect all sectors, but it is remarkable that the financial sector would be employed, leveraging the European financial market. Additionally, refusal of registration is also worth

⁴⁹ Ibid, p.14

⁵⁰ Ibid, p.16

⁵¹ Ibid.

⁵² See European Commission, com (2021) 775 final, December 8, 2021, pp. 1-2

mentioning in that it would specifically affect sectors and be legally controversial.⁵³

3-1-2 Feedback from Stakeholders

Even if the EU enacts ACI, it will remain questionable if ACI really works. In implementing ACI, the private sector is likely to be the ones that would take concrete action and shoulder the costs. If they do not take action, the ACI would be pointless, failing to deter. It is thus necessary to understand what the private sector that would be involved in the implementation will think, which could identify the hurdles of implementation. This would guarantee the feasibility of ACI.

Based on necessity, the Commission held a stakeholder meeting for ACI on April 16, 2021. They also set two periods for receiving feedback on ACI from stakeholders, one from February 17 to March 17, 2021 and the other from December 10, 2021 to April 1, 2022.

In the first feedback period, 22 feedbacks, including from one individual and two anonymous responders were collected, including those from outside of the EU, such as Japan and the United States. In the second round, 25 feedbacks, including from one individual and three anonymous responders were collected. The content of each feedback is summarised in the Appendix.

Remarkably, most of the stakeholders agree on implementing the ACI. For instance, Eurometaux, which consists of non-ferrous heavy metal producers, supports the concept of the ACI, designed for counteracting and deterring economic coercion. It is worth noting that since the heavy metal industry relies greatly on materials from other countries, they are jeopardising being cut off from material supply as retaliation if they implement the ACI. Their support suggests that they perceive the benefit stemming from the ACI to outweigh the cost of implementing it.

In contrast, some entities are taking a negative stance against implementing the ACI. BMW is one; they are not convinced that the existence of the instrument alone is sufficient to deter economic coercion. Although ACI has not yet been enacted, BMW claims the effect should be tested. Furthermore, as the company relies on supply chain from other countries, including China, for production as well as requirements on CO2 emissions of the whole supply chain, it is hard to achieve full compliance if the ACI is enacted.

The claims described above are insightful when contemplating the hurdles of implementing the ACI.

⁵³ If a refusal is conducted, this is not based on a legal basis, but rather on a political one. This cannot be justified in legal terms.

First, it is true that reliance on the supply chain is something to tackle for most of corporations. Supply chains would be vulnerable to geopolitical risks. Interestingly, in contrast with BMW, Airbus, which is a multinational company and has its factory operating in China, takes an affirmative stance on the ACI. This implies that even though supply chains have diversified, some can manage geopolitical risks, while others cannot. Second, full compliance is an invisible cost for firms operating in the EU. For them, introducing another legal measure is an additional cost. Unless they adjust to a newly introduced measure, they might violate it. Given the massive size of the whole supply chain, it is cost-incurring for multinational firms to fully comply with all legal requirements. Third, it has been pointed out that the scope of the ACI and the conditions under which it is triggered remain vague. According to the proposals, the scope has not been defined where a third country interferes in the legitimate sovereign choices of the Union or a Member State by seeking to prevent or obtain the cessation, modification or adoption of a particular act by the Union or a Member State.⁵⁴ This does not suggest concrete actions or criteria by which ACI would be triggered, which concerns the private sector, because they cannot be certain when and how much cost they would be burdened with in implementing ACI.

On the other hand, clarifying the scope would matter, which gives assurance to the private sector, mitigates uncertainty, and simultaneously incentivises a potential attacker to conduct “under-threshold attacks” without applying ACI. Cunningham and Fravel (2015) argue, with respect to deterring China, that if China maintains an assured posture of retaliation with a strict no-first-use pledge, it would enhance crisis stability by requiring the United States to use nuclear weapons first.⁵⁵ This suggests that clarifying the conditions may unintentionally increase the possibility of an attack.

In order to deter economic coercion as envisaged by ACI, it is necessary not only to tackle the private sector’s needs but also to argue what is required for deterrence. Particularly, in a deterrence by punishment, what the retaliatory measures would be and how an attacker would evaluate them are important. As will be discussed below, how to ensure credibility and unacceptable damage becomes important for the success of ACI.

3-2 Key Elements of Deterrence

As discussed above, there seem to be some hurdles in implementing ACI that need to be tackled by the EU.

⁵⁴ European Commission, 2021/0406 (COD), December 8, 2021, p. 15

⁵⁵ Fiona S. Cunningham, M. Taylor Fravel, “Assuring Assured Retaliation China’s Nuclear Posture and U.S.-China Strategic Stability,” *International Security*, Vol. 40, No. 2 (Fall 2015), p. 9

Morgan (2003) states that the essence of deterrence is one party preventing another party from doing something that the first party does not want done, by threatening to seriously harm the other party if it carries it out.⁵⁶ In practice, its intention is to inflict costs outweighing the expected benefits of the action. Deterrence is an act of intimidation, which suggests that it relies on the attacker's perception that retaliatory measures would not materialise if the deterrence succeeds. Perception, however, does not necessarily follow logic, which makes it difficult to understand the preference of attackers. Through past studies, it has been shown that the United States did not understand the preference of the Soviet Union, and vice versa. Therefore, perception creates uncertainty regarding deterrence. Since retaliatory measures would not materialise unless deterrence fails, it is necessary to force the attacker to think that an attack is not worth it. In order to achieve this, Morgan (2003) argues it is essential to demonstrate that retaliation is rational.

In constructing a theory of deterrence, Morgan proposes six key elements: the assumption of a severe conflict, the assumption of rationality, the concept of a retaliatory threat, the concept of unacceptable damage, the notion of credibility, and the notion of deterrence stability.⁵⁷ Morgan (2003) indicates seriousness as an essence of deterrence, so credibility becomes critical.

Credibility is an abstract concept. Morgan (2003) defines it as the quantity of being believed,⁵⁸ suggesting that credibility is not quantified in absolute terms, but rather is determined relatively in accordance with one's perception. In order to enhance credibility, Morgan (2003) argues that the target has to demonstrate its will and intent. Once the attacker clearly perceives the will and understands the intent of the target, it would realise that an attack would be without value, which results in deterrence.

Although will and intent are indispensable factors in deterrence, their existence alone may be insufficient. As stated below, unlike nuclear deterrence which presupposes the state to be the unitary actor, it would be a corporation that would take an action, which suggests that, if an actor (corporation) is incapable of implementing measures, it is not possible to materialise concrete measures, resulting in the failure of deterrence. Incapable actors would undermine its credibility. This is the why will and intent are insufficient, and capability should be added to enhance credibility.

As for deterrence of economic coercion that involves the private sector, it should be mentioned that the actor is not unitary; rather, both the state and the private sector would play different roles in deterring economic coercion, because actors demonstrating their will and those incurring costs are not

⁵⁶ Patrick M. Morgan, "Deterrence Now," *Cambridge University Press* 2003, p.1

⁵⁷ Ibid, p.8

⁵⁸ Ibid, p.15

the same. The state would often demonstrate its resolve to commit to deterring economic coercion when necessary, but it does not pay the costs of materialising concrete measures. On the other hand, the private sector rarely demonstrates its will, but will actually shoulder the cost. This suggests that, even though the state demonstrates its will and intent, deterrence would not be realized unless the private sector agrees to burden the costs for retaliatory measures.

Based on the argument that actors are not unitary, but rather consist of the state and the private sector, capability means different things for each actor. For the state, enforcement capability is crucial in enhancing credibility. The private sector subject to regulations that stipulate retaliatory measures would not comply with the regulation or cooperate with the state unless the state has enforcement capabilities; otherwise they would not actually take on the burden of a penalty or a fine when they breach the regulations. It is thus essential for the state to hold enforcement capabilities. As for the private sector, implementation capabilities would be the important, though they may be inconspicuous. In the case of export control, for example, export companies will have to be up to date with every regulation amendment in order to not violate it. Since the process is often complicated and takes months to complete, the companies would need to hire experts for export control. There may be cases where some of them unintentionally violate the regulations due to a lack of knowledge and capability.

In arguing for ACI as a tool for deterring economic coercion, credibility is indispensable and can be divided into four factors, namely the wills and the capabilities of both the state and the private sector.

Since credibility relies on perception, while facts can demonstrate the credibility to some extent, they are not enough; what China perceives to be the EU's will and capability is just as important. In the following sections, I first state the facts; the wills of the EU and the private sector; and capabilities of the state (enforcing capability) and the private sector (implementation capability). Then, I discuss China's perceptions on EU's credibility towards the EU and the United States U.S. and compare it with what is lacking for EU's credibility.

3-2-1 The will of the EU (state)

It is safe to say that the EU has expressed its political will towards economic sanctions and coercions. In the case of economic sanctions against Russia, the EU has conveyed its will. For example, on February 28, 2022, the EU decided to expand the list of targets, including businessmen in the banking and oil sectors, stating that those who enable the invasion of Ukraine will pay a price for their actions.⁵⁹

⁵⁹ "Russia's military aggression against Ukraine: Council imposes sanctions on 26 persons and one entity," European Council, February 28, 2022, access granted on November 4, 2023, <https://www.consilium.europa.eu/en/press/press-releases/2022/02/28/russia-s-military-aggression->

In addition, on April 8, 2022, the EU adopted the fifth round of sanctions, prohibiting to purchase, import and transfer coal and other solid fossil fuels into the EU if they originated in Russia or are exported from Russia.⁶⁰ Regarding the fifth economic sanction, Josep Borrell, High Representative for Foreign Affairs and Security Policy, stated that the aim of their sanctions is to stop the reckless, inhuman and aggressive behaviour of the Russian troops and make clear to the decision-makers in the Kremlin that their illegal aggression comes at a heavy cost.⁶¹

Since ACI has not yet been enacted, there are fewer statements on it, but Valdis Dombrovskis, Executive Vice-President and Commissioner for Trade, made a comment “this final agreement on our new Anti-Coercion Instrument is truly a major step forward for the EU. It sends a clear signal to our global partners that we reject all forms of economic coercion by third countries.”⁶² Again, while ACI has not yet made any achievements, this comment made clear that the EU would reject all forms of economic coercion.

Ever since the economic coercion towards Lithuania, the EU has conveyed the will to defend its value and to take action. In economic sanctions against Russia, the EU expressed its will and actually imposed subsequent sanctions. It may be a subtle point yet it is worth mentioning that although the commissioner declared to endorse the concept of ACI and to reject economic coercion, the comment did not mention to what extent the EU could bear the cost of implementing ACI.

3-2-2 The Will and Hurdles of the Private Sector

As described above, most of the private sector involved in ACI agree on the concept of ACI. In this sense, the state (EU) and the private sector seem to have reached a consensus on implementing ACI. As Drezner (2003) states, economic coercion is, basically, the disruption of economic exchange. Correspondingly, Annex 1 proposes measures of restrictions on trade, on access to the financial market, and on registration and authorisation. Here, a simple question could be posed: can the private sector really disrupt or cease economic exchange with concerned parties? For example, China is the third

[against-ukraine-council-imposes-sanctions-on-26-persons-and-one-entity/](#).

⁶⁰ “EU adopts fifth round of sanctions against Russia over its military aggression against Ukraine,” European Council, April 8, 2022, access granted on November 4, 2023, <https://www.consilium.europa.eu/en/press/press-releases/2022/04/08/eu-adopts-fifth-round-of-sanctions-against-russia-over-its-military-aggression-against-ukraine/>.

⁶¹ Ibid.

⁶² “Political agreement on new Anti-Coercion Instrument to better defend EU interests on global stage,” European Commission, June 6, 2023, access granted on November 4, 2023, https://ec.europa.eu/commission/presscorner/detail/en/IP_23_3046.

largest trade partner for the EU in exports, while in imports it was the largest partner in 2022.⁶³ Given this important status, it would seem difficult to cut China off from economic exchange. Even if the EU orders the private sector to cut trade ties with China, it is uncertain how the EU would compensate for the financial loss of the private sector. This is what the EU should tackle.

The above, however, may be difficult to achieve. Tsuruoka (2021) argues that it is inconceivable for the government to directly compensate companies for lost revenue.⁶⁴ This illustrates the limited role of government in tackling economic loss by the private sector even when it is initially triggered by policy. From a different perspective, Reynolds and Goodman (2023) propose the creation of a fund that helps affected industries and corporations. Interestingly, this fund would not be designed for compensation, but to help cover the costs of finding new markets or suppliers.⁶⁵ In this sense, this fund would facilitate to mitigate risks of economic coercion, yet fails to compensate for the costs incurred by economic coercion and address dissatisfaction from the private sector demonstrated in the stakeholder meetings.

As to compensation, it will be imperative to decide the scope of coverage and whether the scope would be proportionate. As demonstrated, some literature mention the importance of compensation, but fail to explain the scope and specify the costs. Reducing concerns from the private sector would likely enhance the will of the private sector and the feasibility of ACI for the private sector.

3-2-2-1 Sales Decline

Duchâtel (2022) argues that the current proposition goes beyond trade tariffs.⁶⁶ It allows the imposition of quotas, export restrictions, limitations on IP rights, participation in public procurement procedures and on foreign direct investment, restrictions of access to banking services and European financial markets, and even sanctions targeted at "natural and legal persons" when they act on behalf of the government of the third party concerned.⁶⁷ This means that once ACI is implemented, it is more likely that a wide range of economic activities would be affected and all the proposed measures are

⁶³ See, the link below; [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=China-EU -
_international_trade_in_goods_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=China-EU_-_international_trade_in_goods_statistics).

⁶⁴ Michito Tsuruoka, "Is Collective Defense in the Economic Domain Possible? Lessons from the Australia-China Conflict," *the Sasagawa Peace Foundation*, August 4, 2021, https://www.spf.org/iina/en/articles/tsuruoka_01.html.

⁶⁵ Matthew Reynolds and Matthew P. Goodman, *Ibid*, p. 40

⁶⁶ Mathieu Duchâtel, "Effective Deterrence? The Coming European Anti-Coercion Instrument," *Institut Montaigne*, December 2, 2022, <https://www.institutmontaigne.org/en/expressions/effective-deterrence-coming-european-anti-coercion-instrument>.

⁶⁷ *Ibid*.

intended to disrupt economic exchange with the concerned party. It is hence inevitable that sales would decline for the relevant private sector.

It is not difficult to imagine that the private sector has been concerned about the compensation mechanism. For example, Eurometaux, which is in favour of implementing the ACI, states that even though they endorse the concept of the ACI, they seek compensation for the damage caused to EU businesses by the ACI. Additionally, France Industrie, which represents 31 sectorial federations and 48 big private and public companies from all sectors⁶⁸, welcomes the proposal of the ACI, yet wishes to include a real mechanism of compensation or indemnification for damage caused by the ACI.

Although ACI does not stipulate a compensation mechanism, it should be asked; how much will the financial loss be and should the government cover it? Before debating, it is worth mentioning that measures stipulated in the ACI, particularly export control, are not designed to reduce sales; they are for strengthening regulations, which do not ban exports. This means it is impossible to clearly find a causal relation between sales decline and export control and to precisely calculate financial loss. Although one cannot calculate a precise number, it can be predicted that ACI would affect sales in an indirect manner.

For example, according to a report by Kearney, Applied Materials and Lam Research have already revised their revenue forecasts in the wake of new U.S. export control towards China announced in October 2022. If they cannot export to China due to the regulation, Applied Material anticipates a \$250 to \$550 million decrease in Q4 net sales, which falls in the range of 4 to 10% of their top-line revenue. Meanwhile, Lam Research has warned of \$2 to \$2.5 billion in lost sales over the course of 2023, roughly 13 to 17% of their total revenue.⁶⁹

Given the large amount of costs described above, it is unrealistic for the government to shoulder all the costs caused by measures taken. It would then matter how much of it the government should shoulder. The financial loss stems from the assumption that, while relevant companies produce items with cutting-edge technology, they cannot export and sell designated items to China, which accounts for a high proportion of their sales, due to the regulation. This means that, once alternative buyers are found, the financial loss need not be compensated. Since the items involve advanced technology and

⁶⁸ Access granted on July 2, 2023, <https://www.franceindustrie.org/nos-missions/>.

⁶⁹ Bharat Kapoor, Mike Hales, Drew DeLong, and Stefan Antonsson, "How much direct revenue exposure do semiconductor companies have to US export controls and restrictions against China?", "Kearney, November 18, 2022, <https://www.kearney.com/industry/technology/article/-/insights/how-much-direct-revenue-exposure-do-semiconductor-companies-have-to-us-export-controls-and-restrictions-against-china>.

there are few suppliers, demand for the items remains high. Based on this logic, two proposals are conceivable.

First, a system in which the government guarantees purchase of items should be put in place. With such a system, relevant companies could avoid loss. This system, however, poses challenges, such as incentivising companies to produce irrational amounts of items without a sound projection of sales, thanks to the guarantee and the prices of the government purchases. In order to resolve the two challenges, the prices should be set at cost without profit. If there is no profit with the system, companies are not incentivised to utilise it as long as they seek profit. This system can be utilised only when companies want to avoid loss, acting as a safety net for them. For the government, since the prices are set to the minimum while the demand remains high, it is more likely to be profitable, which at least burdens no cost.

Second, as a consequence of the first point, the government should support finding alternative buyers other than China, a point also made by Reynolds and Goodman (2023). In this proposal, interests of both sides overlap because it gives opportunities for companies to explore new markets, while the government need not be burdened with financial loss. Indeed, alternative buyers contribute to mitigating loss. For example, Australia managed to compensate for financial loss caused by import restrictions from China. The Australian government estimates the financial loss due to the Chinese trade restriction was around \$4 billion⁷⁰ whereas exports to the rest of the world increased by \$3.3 billion during the same period.⁷¹ This implies financial loss can be averted by changing business partners.

3-2-3 The EU's Enforcement Capability

It would be as imperative to implement policies as to enact them. Particularly, unlike other EU policies, ACI would involve the private sector in implementation. In order to avert inactions by the private sector afraid the EU would be required to hold enforcement capabilities to implement the policy, which would contribute to its feasibility.

Although the EU is of course a legislative authority, it does not cover all law enforcements in each

⁷⁰ See the following: the Department of Treasury of Government of Australia, "Building Resilience and the Return of Strategic Competition, Melbourne," September 6, 2021, <https://ministers.treasury.gov.au/ministers/josh-frydenberg-2018/speeches/building-resilience-andreturn-strategic-competition>.

⁷¹ Ibid.

country. For example, when a company in an EU country breaches export control, it is the national authority that is in charge of the breach and imposes a fine. It is a fact that, although the EU monitors how EU policies are implemented, national authorities play a larger role. Scholten (2017) correctly states that direct enforcement of EU law has been traditionally kept at the national level,⁷² in respect of national sovereignty. Bauer and Bromley (2019) point out that standards for the trade of military goods are legally binding in the entire EU, yet the means of implementation are left to each Member State.⁷³

As mentioned above, it is anticipated that most of the measures employed by ACI would be export control, which suggests that discussions regarding law implementation of export control can be applied to ACI in the same manner. Unlike export control, however, it is not yet clear whether, in the process of ACI enactment, a penalty of breach will be included in the fixed provision. In contemplating the capability of the EU to enforce ACI, one should consider both cases because it is obvious that the penalty will directly or indirectly affect the enforcement capability.

3-2-3-1 In Cases with Fines

As Scholten (2017) and Bauer and Bromley (2019) point out, implementation of export control has relied on national level authorities, which suggests that each country has a different penalty for breach. In terms of criminal penalty, most countries have set a prison sentence of 5-10 years, whereas administrative fines in cases of neglect are diverse⁷⁴; Germany has set administrative constraints but no concrete fines; Italy has set fines of up to 90,000 euro; and the Netherlands has set fines of up to 83,000 euro. Additionally, Denmark has no administrative penalties.

The United States, on the other hand, has set large penalties for breaching secondary sanctions. In 2023, the Office of Foreign Assets Control, which oversees economic sanction implementation, ordered Microsoft to pay 2,980,265.86 US dollars for the exportation of services or software from the United States to comprehensively sanctioned jurisdictions and to Specially Designated Nationals (“SDNs”).⁷⁵

⁷² Miroslava Scholten, “Mind the trend! Enforcement of EU law has been moving to ‘Brussels’,” *Journal of European Public Policy*, 2017, Vol. 24, No. 9, p. 1350

⁷³ Sibylle Bauer and Mark Bromley, “Detecting, Investigating and Prosecuting Export Control Violations,” *Stockholm International Peace Research Institute*, 2019, p.3

⁷⁴ In case severe infringement, such as breach of the defence code, penalties are more severe; for example, France has set fines of up to three times the value of goods or 7,500,000 euro. In this ACI scenario, it is presumed that the private sector would be inactive (non-compliance with ACI) due to profit maximisation, rather than intentionally and significantly harming national interests; therefore I exclude these severe breaches, but rather focus on breaches by inaction.

⁷⁵ “OFAC Settles with Microsoft Corporation for \$2,980,265.86 Related to Apparent

It can be deduced that, given the amount of fines in the EU as compared to those of the United States, fines in the EU are not designed for their deterrence effect against breachers or to contribute to enforcement capabilities. It is, on the other hand, questionable whether setting higher fines would ensure deterrence effect. The answer is probably negative; first, fines are set based on the proportionality of the breach. For example, the Court of Justice of the European Union (CJEU), ordered Poland to pay a fine in 2021, because Poland had failed to implement judicial reforms in accordance with EU standards. In the order, the CJEU states “it is not apparent from the case files that the measures adopted by the Republic of Poland were sufficient to ensure the implementation of all of the interim measures set out in the order of 14 July 2021 and that, therefore, it is no longer necessary to strengthen the effectiveness of those interim measures by imposing a periodic penalty payment”.⁷⁶ Furthermore, the Court also stated that, in light of the circumstances of the case and the ability of the Republic of Poland to pay the fines, the amount of the periodic penalty payment imposed by the order of 27 October 2021 must be reduced to EUR 500 000 per day, from the date on which the order was signed.⁷⁷ From the order described above, it can be understood that the ability of the country to pay is taken into account when deciding fines; and a second breach of the ACI cannot be regarded as severe damage, corresponding to a higher fine. Inactions in ACI will undermine the credibility of ACI, but they do not jeopardise national security or be equated with severe infringement on human rights. Fines set in the AI Act would be a criterion for judging the severity of a breach.

In the proposal, the fine is set to 6% of worldwide annual turnover or 30,000,000 euro at the maximum. As the Act is limited to minimum necessary requirements not to hinder the activities of the private sector, it should thus be proportionate to strike a balance between constraints and freedom, taking “a well-defined risk-based regulatory approach”. In this approach, the first step is to categorise the level of risks. AI systems that pose significant risks to the health and safety or fundamental rights of persons are regarded as high-risk,⁷⁸ such as biometric identification of natural persons, management of critical infrastructure, and education. Fines are determined in accordance with the categorisation.

One could then ask; is it possible to equate high risks in the AI Act with breaches in ACI? The answer should be negative because even if the private sector does not follow ACI, such as continuing business

Violations of Multiple OFAC Sanctions Programs,” US Department of Treasury, April 6, 2023, <https://ofac.treasury.gov/media/931591/download?inline>.

⁷⁶ “Order of the Vice-president of the Court,” Court of Justice of the European Union, April 23, 2023, para. 110,

<https://curia.europa.eu/juris/document/document.jsf?text=&docid=273000&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=50045>.

⁷⁷ Ibid, para. 113.

⁷⁸ European Commission, 2021/0106 (COD), p.3

despite an order from the EU, that does not mean it poses significant risk to the health and safety or fundamental rights of persons. It can be thus concluded that fines are not designed for a deterrence effect and it is hardly possible to set higher fines. Correspondingly, it has been reported that at a national level, 78 breaches of export control regulations were recorded in 2020, while eight administrative penalties and seven criminal penalties were applied by national law enforcement authorities.⁷⁹ Therefore, fines would not contribute to the enforcement capability of the EU.

3-2-3-2 In Cases without Fines (Consultation Mechanism)

Based on the discussion above, it is less likely that fines would work to enhance enforcement. On the other hand, fines have not been discussed in the process of ACI enactment. If ACI is legalised as it stands, fines would not be stipulated. It is hence worth discussing enforcement without fines.

For example, the Dual Use of Coordination Group (DUCG) was established following a regulation related to dual-use export control (EC 2021/821). Given a wide range of dual-use technologies, including AI, it was highly predictable that the cost of adjusting for this new regulation would be a burden for corporations. In order not to violate regulations, the private sector required information exchange with authorities. In this context, DUCG was established as a consultation mechanism.

The European Data Protection Board (EDPB) has a consultation mechanism as well. In 2016, the EU enacted a regulation (EU 2016/679) whose objective is the protection of natural persons with regard to the processing of personal data and rules relating to the free movement of personal data. The EDPB was expected to contribute to a consistent application of this regulation throughout the Union, by advising the Commission, particularly on the level of protection in third countries or international organisations, and promoting cooperation of the supervisory authorities throughout the Union.⁸⁰ EDPB was established based on the need of monitoring data controllers, although it is expected to promote cooperation as well.

Article 36 states prior consultation, which stipulates a consultation period of up to eight weeks and written advice to data controllers and processors where supervisory authorities are of the opinion that infringement of the regulation occurred. In most cases, they are not intending to breach the regulation, but rather are insufficiently aware of the risks and breaches. With this prior consultation, it can be expected that breaches will be reduced and eventually enhance law enforcement.

In the two cases of consultation mechanism described above, they are not designed to directly deter

⁷⁹ Ibid, pp. 7-8

⁸⁰ European Union, Regulation (EU) 2016/679, para. 139

violations, as illustrated by the EDPB; rather, they are expected to indirectly reduce violations through information exchange and prior consultation. In ACI, since the scope of application has not been stipulated, it is likely that the private sector will require information and consultation with authorities to comply with the ACI. In this sense, even though this mechanism does not deter violations, it is anticipated to enhance the capability of compliance.

3-2-4 Implementation Capability of the Private Sector

It is plausible that, when ACI is triggered, the private sector would be forced to cut off economic exchange with the target country. According to Annex 1, while some non-export control measures are proposed, such as access restriction to capital and financial markets (i) and imposition of restrictions on the protection of intellectual property rights (h), the measures are mainly presupposed to be export control ((b), (c), (e), (f)). This suggests that the private sector plays a significant role in implementing ACI and its implementation capability is important as well.

As discussed below, the implementation capability of the private sector is insufficient to guarantee to China that the private sector in EU is sufficiently credible. Complying with export control is inevitably burdensome for the private sector. Bauer and Bromly (2019) point out the administrative burden of complying with export control. Their interview research indicates that the administrative burden is considered heavy and time-consuming, mainly due to additional information often requested by the authorities. On average, these [chemical] companies obtain a licence in 3-4 months.⁸¹ While most companies have specific departments for export control, compliance would cost them time.

Concern from the private sector has been accordingly voiced. For example, as mentioned above, BMW expressed concern about legal adjustment, stating that introducing the ACI in the EU may well make full compliance impossible in the future.⁸² Additionally, AFEP, an association of private enterprises in France, expressed concern about legal constraints regarding ACI.⁸³ As mentioned, in order to mitigate the cost, it is possible to establish a consulting mechanism, like the DUCG, but such a point has not yet been mentioned with respect to ACI, leaving the concern of the private sector unaddressed.

⁸¹ Sibylle Bauer and Mark Bromley, *ibid*, p.230

⁸² “Feedback from: BMW Group,” European Commission, March 31, 2022, https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12803-Trade-mechanism-to-deter-counteract-coercive-action-by-non-EU-countries/F2959965_en.

⁸³ See the following; “Feedback from: AFEP,” March 17, 2021, https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12803-Trade-mechanism-to-deter-counteract-coercive-action-by-non-EU-countries/F2001976_en.

Furthermore, although the exact number of export control cases cannot be verified, an increase can be confirmed in qualitative data. For instance, Yuki Sakurada, from Nishimura Asahi, a major law firm in Japan, states that, given the expansion of export control by the United States, not only major firms, but also SMEs have strived to strengthen export control.⁸⁴ Though he mentions Japanese cases, since this trend is global, it could be the same in the EU. In addition, on June 30, 2023, the Dutch government announced a new export control on Deep Ultraviolet (DUV) lithography and EUV lithography.⁸⁵ Given the intensifying geopolitical competition, it is thus expected that the number of export controls would increase.

In terms of labour supply for export control, there has been an understaffing. Although comprehensive quantitative data are unavailable, it can be verified from a micro perspective. For example, Airbus, one of the biggest manufacturing firms in Europe, has posted 65 positions in European countries related to export control (including interns), of which 32 posts have not yet been filled as of November 8, 2023.⁸⁶ Considering the increasing number of tasks in export control, it can be understood that supply cannot meet the demand for export control jobs.

As demonstrated, it can thus be deduced that the capability of the private sector to implement the ACI cannot be regarded as insufficient.

3-3 Credibility towards China

As discussed above, the EU has enhanced enforcement capabilities so as to be able to implement ACI. However, what really matters for deterrence is whether China really believes ACI would work. Even if the EU has the capability, it would be meaningless unless China thinks so. For example, the United States has a nuclear capability that is sufficient to deter North Korea. Although the United States has conveyed the message through various channels, North Korea has not ceased developing its nuclear capability despite being sanctioned and struggling in its funding.

⁸⁴ “Nishimura Asahi,” *Business & Law*, January 11, 2023, access granted on November 8, 2023, <https://businessandlaw.jp/articles/lawyersguide2023-file11/>.

⁸⁵ “The Dutch Government announced an additional export control on semiconductor equipment,” *JETRO*, July 10, 2023, <https://www.jetro.go.jp/biznews/2023/07/5924b578e1080a11.html>. (in Japanese)

⁸⁶ See the link below, access granted on November 8, 2023, <https://ag.wd3.myworkdayjobs.com/en-US/Airbus?q=export%20control&locationCountry=bd34c524a6a04ae6915f5d96fa086199&locationCountry=f2e609fe92974a55a05fc1cdc2852122&locationCountry=131d5ac7e3ee4d7b962bdc96e498e412&locationCountry=2e8c5034deb045d49315417c347472ca&locationCountry=d07f8ca8625e4345b98a91d0558b872a&locationCountry=9696868b09c64d52a62ee13b052383cc&locationCountry=9db257f5937e4421b2fac64eec6832f8&locationCountry=54c5b6971ffb4bf0b116fe7651ec789a&locationCountry=0afb2fa656da42e8bfb6d47bd24a26fa&locationCountry=49ab063f422741e2aef271de00efeac8&locationCountry=a04ea128f43a42e59b1e6a19e8f0b374>.

It can thus be deduced that deterrence depends on the attacker's perception. The perception, however, would not be expressed. Perception is not something tangible and it is impossible to substantiate. Meanwhile, while perception involves these difficulties, it can be indirectly estimated through discourse. When international issues arise, it is often the case that the spokesperson of the Ministry of Foreign Affairs of China expresses their stance through daily press conferences. Tracking these regular press conferences and facts would allow one to estimate their perception on specific issues.

In order to assess the China's perception on the resolve of the EU for implementing ACI, two cases seem ideal: the trade war with the United States; and the Lithuanian case. The former is an illustration of how China acquiesced to the United States. China did so, not based on then current damage, but on *expected* damage in the future. China did not acquiesce because the then current damage was critical, but because the expected damage surpassed the affordable threshold. That is to say, at the time when China acquiesced, China found it feasible that the United States would implement additional measures. The latter example, on the other hand, is useful to see how China currently perceives the EU. By analysing these two cases, it is possible to discern the gap between China's confidence in US and in the EU, and to deduce what can be done for the EU in order to acquire credibility.

3-3-1 EU's Credibility towards China

On November 18, 2021, Lithuania established the Taiwan Representative Office in Vilnius, which was regarded as part of a formal diplomatic relationship between the two states. This is a remarkable event not only for both countries but the international community because in view of the risk of angering China, it is unacceptable for many countries to use the title Taiwan instead of Taipei.

The relationship, however, had gradually transformed in an inconspicuous manner. For example, in 2020, China made efforts to deepen its cooperation with Lithuania within the China-Central and Eastern European Countries Framework,⁸⁷ which was accelerated by the Belt and Road initiative. On May 24, 2021, however, Lithuania decided to withdraw from the Framework, calling the Chinese

⁸⁷ "Vice Foreign Minister Qin Gang Holds Political Consultation with Vice Foreign Minister Neris Germanas of Lithuania," Ministry of Foreign Affairs of Republic of China, January 23, 2020, access granted on November 4, 2023, https://www.fmprc.gov.cn/eng/gjhdq_665435/3265_665445/3195_664630/3197_664634/202002/t20200204_577574.html; "Vice Foreign Minister Qin Gang Meets with Outgoing Lithuanian Ambassador to China Ina Marciulionyte," Ministry of Foreign Affairs of Republic of China, July 24, 2020, access granted on November 4, 2023, https://www.fmprc.gov.cn/eng/gjhdq_665435/3265_665445/3195_664630/3197_664634/202007/t20200728_577576.html.

initiative divisive. China did not particularly comment on the withdrawal of Lithuania, though it could have been regarded as halting the relationship between the two countries. In August 2021, Lithuania announced it would establish a Taiwan Representative Office in its capital. China vehemently opposed this announcement, calling back their ambassador to Lithuania on August 10, stating that the determination of the Chinese government and people to achieve reunification of the motherland is unshakable, and that the red line of safeguarding national sovereignty and territorial integrity cannot be touched. “We[China] urge the side to immediately correct its wrong decision, take practical measures to eliminate the negative impact, and not to go further down the wrong path(中国政府和人民实现祖国统一的决心不可动摇, 维护国家主权和领土完整的红线不容触碰。我们敦促立方立即纠正错误决定, 采取切实措施, 消除恶劣影响, 不要在错误的道路上越走越远).”⁸⁸

On the following day, on November 30, the spokesperson for China commented that the European side should adopt the correct position and avoid disrupting the sound development of relations with China.⁸⁹ China took several retaliatory measures, such as rejection of custom applications and invalidation of diplomatic cards after the establishment of the Taiwan Representative Office, not mentioning the EU or its influence.

Based on the dynamics between the two countries and China’s rhetoric, it can be inferred that China was opposed to the establishment of the office by Lithuania and retaliated without considering EU’s influence.

It would thus be obvious that China would not care about retaliatory measures stipulated in ACI, which means that the credibility criterion would not be met for the EU. Yet, it is worth noting that the EU once imposed sanctions on China for human rights violations. On March 22, 2021, the EU sanctioned eleven individuals and four entities, including Chinese ones.⁹⁰ Prior to the sanction, on March 10, 2021, the EU published a report, conveying its intention to impose sanctions on human rights violators.

⁸⁸“Spokesperson of the Ministry of Foreign Affairs made a statement on China’s decision to recall its ambassador to Lithuania,” Ministry of Foreign Affairs of Republic of China, August 10, 2021, access granted on November 4, 2023,

https://www.mfa.gov.cn/web/fyrbt_673021/dhdw_673027/202108/t20210810_9171362.shtml. (in Chinese)

⁸⁹“Foreign Ministry Spokesperson Wang Wenbin’s Remarks on Joint Letter by Presidents of Two EU Institutions on Taiwan-Related Issue Concerning Lithuania in Response to Letter by Some European Legislators,” Ministry of Foreign Affairs of Republic of China, October 30, 2021, access granted on November 4, 2023,

https://www.fmprc.gov.cn/eng/xwfw_665399/s2510_665401/2535_665405/202110/t20211030_10404355.html.

⁹⁰ “EU imposes further sanctions over serious violations of human rights around the world,” Council of the EU, March 22, 2021, <https://www.consilium.europa.eu/en/press/press-releases/2021/03/22/eu-imposes-further-sanctions-over-serious-violations-of-human-rights-around-the-world/>.

While not mentioning the report by name, on March 22, the spokesperson for China made a comment regarding the sanction, stating China urges the EU to recognize the seriousness of its mistake, reflect on itself, correct them, stop calling itself a "human rights teacher", playing with hypocritical double standards, stop interfering in other countries' internal affairs, and stop going down the wrong path; otherwise, China would respond more resolutely.⁹¹ Two days later, the spokesperson made an additional comment, stating that this move, based on nothing but lies and disinformation, disregards and distorts facts, grossly interferes in China's internal affairs, flagrantly breaches international law and basic norms governing international relations, and severely undermines China-EU relations . . . the EU must end the hypocritical practice of double standards and stop going further down the wrong path; otherwise, China would react more resolutely.⁹² Despite these comments, which frightened the EU, the EU imposed sanctions on China.

The foregoing means that, even though China is not frightened of influence from the EU, it is a fact that the EU actually imposed a sanction on China, despite being threatened with retaliation. Based on the discussion, it is possible that China thinks that the EU would take retaliatory measures, given the fact that the EU did so in 2021. However, considering that China threatened the EU not to impose sanctions and conducted economic coercion towards Lithuania without considering the EU effect, it is conceivable China does not appreciate the EU's credibility to implement ACI. Or, even if China appreciates it, it is not enough to deter China.

3-3-2 the United States's Credibility towards China

The trade war in 2018 is a good example to see how China retaliates against economic coercion because it is often China that ignites economic coercion and it rarely retaliates against economic coercion. One cannot overlook the importance of the United States market that has subsumed international businesses, which is one of the determinant factors why China acquiesced to the United States's demand. However, it is worth noting that the fact that China acquiesced means China believed that the United States would impose more retaliatory measures unless it acquiesced at that time. In other words, China had confidence in the United States on that point.

⁹¹ "The spokesperson of the Ministry of Foreign Affairs announced that China has imposed sanctions on relevant EU institutions and personnel," Ministry of Foreign Affairs of Republic of China, March 22, 2021, access granted on November 4, 2023, https://www.mfa.gov.cn/web/fyrbt_673021/dhdw_673027/202103/t20210322_9171336.shtml. (in Chinese)

⁹² "Foreign Ministry Spokesperson Announces Sanctions on Relevant EU Entities and Personnel," Ministry of Foreign Affairs of Republic of China, March 22, 2021, access granted on November 4, 2023, https://www.fmprc.gov.cn/eng/xwfw_665399/s2510_665401/2535_665405/202103/t20210322_9170814.html.

By analysing how China acquiesced, it is possible to infer the conditions necessary to obtain credibility for the EU, which can be applied to ACI. During the election campaign in 2016, Donald Trump, a Republican candidate at the time, alleged he would revise NAFTA and TPP for the sake of better results for the United States. Additionally, he emphasised protecting taxpayers and creating jobs for them in response to the decline of global competitiveness of US companies, one of which was the solar industry—one of the most vulnerable sectors in the United States.

In this context, in which the United States economy was relatively weakened and China emerged, the Trump administration was inaugurated with voices asking for help and protection.

Given the domestic voices, the Trump administration took several actions, one of which was a safety net measure stipulated in Section 201 Actions announced on January 23, 2018, designed to impose tariffs on residential washing machines and solar products. In his remarks, President Trump stated “we support a resolution that is in the interest of American workers and, also, the American consumer. We’re going to benefit our consumers, and we’re going to create a lot of jobs,”⁹³ which was aligned with what he promised during the election campaign, a promise he kept. China did not officially comment at that time.

On February 16, the Department of Commerce of the United States released a report proposing tariffs on steel and aluminium in response to the risk that excessive supply of items from foreign companies undermines national security of the United States.⁹⁴ On March 8, 2018, an executive order was announced to impose 25% and 10% tariffs on aluminium and steel import, respectively,⁹⁵ claiming that the trade deficit between the United States and China should be reduced. On March 24, Xinhua cited Prime minister Liu as saying that China is “ready and capable of defending its national interest and hopes both sides will remain rational,”⁹⁶ implying defensive measures against the United States

⁹³ “Remarks by President Trump at Signing of Section 201 Actions,” White House, January 23, 2018, <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-signing-section-201-actions/>.

⁹⁴ Don Lee, “Commerce Department urges Trump to impose tariffs or quotas on steel and aluminum imports,” *Los Angeles Times*, February 18, 2018, <https://www.latimes.com/business/la-fi-steel-tariffs-20180216-story.html>.

⁹⁵ “President Donald J. Trump is Addressing Unfair Trade Practices That Threaten to Harm Our National Security,” White House, March 8, 2018, <https://trumpwhitehouse.archives.gov/briefings-statements/president-donald-j-trump-addressing-unfair-trade-practices-threaten-harm-national-security/>.

⁹⁶ “China tells U.S. it will defend interests after Trump tariffs,” *CTV News*, March 24, 2018, <https://www.ctvnews.ca/mobile/business/china-tells-u-s-it-will-defend-interests-after-trump-tariffs-1.3856942?cache=yesclipId10406200text/html; charset=utf-80404/7.569977>.

as well as a desire not to deteriorate the relations at the same time.

On April 1, 2018, China announced to impose a 15% tariff on 120 items from the United States and a 25% tariff on eight items in a proportionate manner with that of the United States. On May 3, the United States and China resumed trade talks. They agreed to continue to negotiate some trade issues.⁹⁷

On May 22, the Ministry of Finance of China announced that China cut tariffs on automobile and its parts from 25% to 15% despite the United States having lowered tariffs, taking the need to reform as an entire country and industrial supply-side structure, and the demand for consumption into account.⁹⁸ In its remark, China did not mention the United States, but chronologically it reflected the United States demand and could be regarded as acquiescence from China in this context.

Officially, China has not articulated fear or what unacceptable damage the United States might bring, which makes it difficult to judge what the determinant factors for acquiescence are for China, or even if China had confidence in the United States's resolve. Nonetheless, it is a fact that China acquiesced to the United States's demand, which undeniably suggests China's confidence.

Additionally, the United States had conveyed its resolve to impose more costs on China in addition to measures actually taken. For example, on September 2017, the International Trade Commission of the United States announced foreign manufacturing of solar cells and panels have contributed to "serious injury" to US cell and panel manufacturers,⁹⁹ which was sufficient for implementing safeguard stipulated in Trade Act of 1974. According to a document obtained by Politico, the Trump administration elucidated its intent to protect the United States, stating "while solar energy is forecast to play a larger role in the world's energy mix, other countries stand to benefit significantly more than U.S. workers."¹⁰⁰ Accordingly, the Trump administration actually imposed tariffs on solar products on behalf of industry's demand. Similarly, on January 23, 2018, when President Trump was asked about a tariff on aluminium, he answered "we're looking at it[tariff on aluminium]. We're looking at

⁹⁷ "US - China trade talks end with key differences still unresolved," *Right Vision Media*, May 8 2018, access granted on September 11, 2023

link.gale.com/apps/doc/A537759379/ITOF?u=unitokyo&sid=bookmark-ITOF&xid=a4b18086.

⁹⁸ "Relevant person in charge of the Customs Tariff Commission Office of the State Council answered reporters' questions on reducing import tariffs on complete automobiles and parts," Ministry of Finance of Republic of China, May 22, 2018, access granted on November 4, 2023, https://www.mof.gov.cn/zhengwuxinxi/zhengcejiedu/201805/t20180522_2904010.htm. (in Chinese)

⁹⁹ Jacob Yaniero, "Suniva, SolarWorld Tariff Case turns to remedies," *Norton Rose Fullbright*, October 9, 2018, <https://www.projectfinance.law/blog/2017/october/suniva-solarworld-tariff-case-turns-to-remedies/>.

¹⁰⁰ Emily Holden, "U.S. setting stage for solar trade war with China," *Politico*, December 15, 2017, <https://www.politico.com/story/2017/12/15/trump-solar-power-china-trade-barriers-230854>.

a lot of things.”¹⁰¹ As stated above, the Trump administration actually imposed a tariff on aluminium.

Judging from the two events mentioned above, President Trump did as he said, which increased dependability of his words. Furthermore, the United States consistently demanded a reduction in trade deficits from the very beginning of Trump’s election campaign in 2016. During the trade war, Trump’s resolve never changed. According to remarks delivered on March 22, 2018, President Trump asked Chinese counterparts to immediately reduce the trade deficit by \$100bn.¹⁰² On April 5, given a report that suggested \$50bn would be appropriate for tariffs on import from China, Trump instructed the United States Trade Representative to consider whether \$100 billion of additional tariffs would be appropriate under section 301 and, if so, to identify the products upon which to impose such tariffs.¹⁰³ On May 3, it has been reported that USTR asked its Chinese counterpart to reduce the trade deficit by at least \$200bn by the end of 2020,¹⁰⁴ which eventually led to the tariff reduction on automobiles.

Therefore, in terms of credibility, at least two conditions should be met: conveying clear and consistent intention that alarms the other party; and acting on what is said withstanding costs, which enhances the credibility of words. These two conditions were missing in the Lithuanian case of 2021. If these two were achieved, it would be possible for the EU to obtain sufficient credibility towards China for deterrence.

3-3-3 Future Prospects

As discussed above, it is obvious that the EU has been left behind so far in terms of credibility with respect to China. However, this is based on facts of the past; there are some factors that influence future prospects. Here, in order to envision future prospects, it is worth noting two points: factors for enhancing credibility and of mitigation.

¹⁰¹ “Remarks by President Trump at Signing of Section 201 Actions,” White House, January 23, 2018, <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-signing-section-201-actions/>.

¹⁰² “Remarks by President Trump at Signing of a Presidential Memorandum Targeting China’s Economic Aggression,” White House, March 22, 2018, access granted on November 4, 2023, <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-signing-presidential-memorandum-targeting-chinas-economic-aggression/>.

¹⁰³ “Statement from President Donald J. Trump on Additional Proposed Section 301 Remedies,” White House, April 5, 2018, access granted on November 4, 2023, <https://trumpwhitehouse.archives.gov/briefings-statements/statement-president-donald-j-trump-additional-proposed-section-301-remedies/>.

¹⁰⁴ “US - China trade talks end with key differences still unresolved,” *Right Vision Media*, May 8 2018, access granted on September 11, 2023 link.gale.com/apps/doc/A537759379/ITOF?u=unitokyo&sid=bookmark-ITOF&xid=a4b18086. 3

3-3-3-1 Enhancing Factors

It is a fact that the EU has not taken actions to tackle economic coercion. Yet, it is worth noting that there had not been a legal basis to counteract economic coercion. This means that the past record of EU's inaction cannot necessarily be applied to the future of whether the EU would be able to counteract with a legal basis.

Moreover, two promising factors can be considered. First, once the ACI is enacted, the EU would be incentivised to counteract. The EU has, undeniably, not acted, which could be a stigma for the EU. It could be predicted that the EU would strive to removing said stigma. The EU would thus be incentivised to counteract if and when economic coercion occurs. In a case where economic coercion occurs after the enactment of the ACI, the EU would be further stigmatised unless it takes actions for the first time. It is therefore plausible that the threshold for triggering the ACI would be lowered.

Second, despite the EU's inaction in the Lithuanian case, the EU performed better in economic sanctions against Russia. Since economic sanctions against Russia are unprecedented, it is possible to judge to what extent the EU can convey its resolve.

The EU has adopted the 11th package of economic sanctions, as of August 29, 2023. On February 23, 2022, the EU adopted the first package of economic sanctions, including asset freeze, prohibition from making funds, travel ban in the EU, and export control. For example, Article IV stipulates export and transfer bans on key sectors, such as transport, telecommunication, energy, and mineral resources. Moreover, (CFSP) 2022/265 stipulates asset freeze, in which competent authorities of a Member State may authorise the release of certain frozen funds or economic resources belonging to the entities listed.¹⁰⁵

On March 1, 2022, remarkably, the EU decided to prohibit providing financial messaging services known as the SWIFT system to Bank Otkritie, Novikombank, Promsvyazbank, Rossiya Bank, Sovcombank, VNESHECONOMBANK (VEB), and VTB BANK. SWIFT's messaging services are trusted and used by more than 11,000 financial institutions in more than 200 countries and territories around the world.¹⁰⁶ This is not only related to financial institutions, but to individuals when they use credit cards. The prohibition of SWIFT has a devastating effect in a manner that restricts daily transactions by credit cards. According to an estimation by Russia, the exclusion could cut Russia's

¹⁰⁵ (CFSP) 2022/265

¹⁰⁶ Swift, access granted on August 30, 2023, <https://www.swift.com/about-us/discover-swift/messaging-and-standards>.

GDP by 5%.¹⁰⁷

In addition to measures taken, the EU has conveyed its resolve. On the fourth sanction on March 15, 2022, Josep Borrell, High Representative for Foreign Affairs and Security Policy, stated “As President Putin’s war against Ukrainian people continues, so does our resolve to support Ukraine and cripple the financing of Kremlin’s war machinery.”¹⁰⁸ On October 6, 2022, Josep Borrell also stated “this new sanctions package against Russia is proof of our determination to stop Putin’s war machine and respond to his latest escalation with fake “referenda” and illegal annexation of Ukrainian territories.”¹⁰⁹ Furthermore, on December 16, 2022, he restated the resolve of the EU, saying “the European Union is responding to this latest escalation and war crime with our 9th package of hard-hitting sanctions. We will continue targeting the economy and against those who are instrumental in this brutal war.”¹¹⁰

Judging from the repeatedly expressed resolve and measures taken, the EU has no doubt conveyed its message to Russia with impeccable resolve, even if it would cost the EU.

3-3-3-2 Mitigating Factors

If a state is economically coerced and does nothing, this reputation would protract as a stigma. For example, when China conducted economic coercion in 2020 to contest the establishment of the “Taiwan” representatives office, the EU filed the case to the WTO; however, it did virtually nothing to retaliate against China’s economic coercion. China, on the other hand, has conducted several economic coercions, some of which are discussed in Reynolds and Goodman (2023): Japanese fishing boat captain arrest (2010); Norwegian case in response to Liu Xiaobo Nobel Prize (2010); Philippine

¹⁰⁷ Saloni Sardana, “What exclusion from the SWIFT banking system means for Russia,” *Money Week*, February 28, 2023, <https://moneyweek.com/economy/global-economy/604512/what-exclusion-from-the-swift-banking-system-means-for-russia>.

¹⁰⁸ “Russia’s military aggression against Ukraine: fourth EU package of sectoral and individual measures,” Council of the European Union, March 15, 2022, <https://www.consilium.europa.eu/en/press/press-releases/2022/03/15/russia-s-military-aggression-against-ukraine-fourth-eu-package-of-sectoral-and-individual-measures/>.

¹⁰⁹ “EU adopts its latest package of sanctions against Russia over the illegal annexation of Ukraine’s Donetsk, Luhansk, Zaporizhzhia and Kherson regions,” Council of the European Union, October 6, 2022, <https://www.consilium.europa.eu/en/press/press-releases/2022/10/06/eu-adopts-its-latest-package-of-sanctions-against-russia-over-the-illegal-annexation-of-ukraine-s-donetsk-luhansk-zaporizhzhia-and-kherson-regions/>.

¹¹⁰ “Russia’s war of aggression against Ukraine: EU adopts 9th package of economic and individual sanctions,” Council of the European Union, December 16, 2022, <https://www.consilium.europa.eu/en/press/press-releases/2022/12/16/russia-s-war-of-aggression-against-ukraine-eu-adopts-9th-package-of-economic-and-individual-sanctions/>.

Scarborough Shoal (2012); THAAD deployment in South Korea (2016); Mongolian case in response to Dalai Lama visit (2016); Australian case in response to calling for Covid-19 investigation (2020); Canadian case in response to Meng Wanzhou extradition (2018); and Lithuanian case (2021).

These achievements are significant for China because they would become the standard for implementing economic coercion in the future. This means there is the risk that China would be stigmatised if the same situation under which China once implemented economic coercion occurs and China does not respond to it. Since China is incentivised to avoid stigmatisation for the sake of regime survival, China is inclined to trigger an economic coercion.

Additionally, the EU is not exempt from the issue of backfill; even if the EU implements retaliatory measures against China to deter economic coercion, it is possible that EU's allies, such as the United States and Japan, would continue transaction with Chinese corporations, thereby diminishing the damage of EU's retaliatory measures. Since ACI is not binding for corporations of other countries, it would need to control these companies. This point has been mentioned in a G7 summit,¹¹¹ that international cooperation is required. As of now, ACI lacks such international cooperation, leaving the backfill issue unaddressed.

¹¹¹ See "G7 Trade Ministers' Statement Osaka-Sakai, 29 October 2023," October 29, 2023, <https://www.mofa.go.jp/files/100573173.pdf>.

Chapter 4 Unacceptable Damage

Chapter 4 Unacceptable Damage

As Morgan (2003) argues, unacceptable damage relies on rationality. Unacceptable damage is designed to outweigh the expected benefit of the attack, leading to an eschewal of the attack based on a rational cost/benefit analysis. It is, however, not obvious how an attacker would calculate the cost, which suggests that a cost/benefit analysis is not determined absolutely, but rather is dependent on the attacker's perception. It is thus possible for the attacker to initiate an attack regardless of rational cost/benefit analysis.

Russia's invasion into Ukraine is an illustrating example. On February 24, 2022, Russia initiated a special operation towards Ukraine which was essentially an invasion. During this operation, as of August 18, 2023, the New York Times reported the number of deaths among the Russian troop is as many as 120,000.¹¹² In addition to damages on the battlefield, Russia has been massively sanctioned by western countries. According to an estimate by the World Bank, the GDP of Russia dropped by 2.1%¹¹³ and 300 billion euro asset of the Russian Central Bank has been blocked.¹¹⁴ Nevertheless, Russia decided to conduct the operation and has not ceased so far. This illustrates that there could be cases in which a cost/benefit analysis does not work.

The foregoing, however, does not necessarily mean rationality always works. It is possible that rationality does not indicate pure cost/benefit analysis results; rather, an attacker may have a different preference wherein cost is deprioritised for the sake of political goals. Therefore, the attacker could rationally not care about costs. This aligns with Morgan's (2003) argument on the importance of understanding the opponent's cost benefit calculation, but it does not provide instructions on exactly how to gain such an understanding.¹¹⁵

¹¹² Helene Cooper, Thomas Gibbons-Neff, Eric Schmitt and Julian E. Barnes, "Troop Deaths and Injuries in Ukraine War Near 500,000, U.S. Officials Say," *the New York Times*, August 18, 2023, <https://www.nytimes.com/2023/08/18/us/politics/ukraine-russia-war-casualties.html>.

¹¹³ "Infographic - Impact of sanctions on the Russian economy," European Council, May 4, 2023, access granted on October 7, 2023, <https://www.consilium.europa.eu/en/infographics/impact-sanctions-russian-economy/>.

¹¹⁴ Ibid.

¹¹⁵ Patrick M. Morgan, *ibid*, p.15

It is crucial to know the preferences of potential attackers, which may be that political resolve outweighs monetary costs. We can evaluate the series of economic coercions by China as examples. For example, China implemented import restrictions following a claim by Australia in 2020 seeking independent research on the origin of Covid-19. The restricted items included wine, coal, and beef, from which China has benefited, which means that the import restrictions deprived China of that benefit. It is thus economically irrational for China to impose the import restrictions. Paradoxically, China went forward regardless of a cost/benefit analysis, suggesting that the political resolve to confront Australia outweighed monetary benefit.

China has, indeed, put emphasis on political issues. Goldstein (2020) argues that the Xi administration has made efforts on three points in a strategy to rejuvenate China, one of which is a reliance on its growing power to resist challenges to the core interests of China. He additionally argued that under Xi, China has devoted more attention and resources to ensuring that it has the capabilities to defend the core interests.¹¹⁶ It is not clear what exactly “core interests” signify in the paper, but it is well known to be based on a Chinese whitepaper published in 2011, which indicates the following: 1) state sovereignty; 2) national security; 3) territorial integrity; 4) national reunification; 5) China’s political system established by the Constitution and overall social stability; and 6) basic safeguards for ensuring sustainable economic and social development.¹¹⁷

The Lithuanian case is an illustrating example. Lithuania was sanctioned on the grounds that it utilised the term “Taiwan” instead of “Taipei”, despite other countries having offices using the latter term whose functions are virtually the same. The name Taiwan is related to national reunification, which China regards as a challenge to its core interests. This is the reason why China employed economic coercion even if it would inflict costs on itself.

However, what should be asked is to what extent China would protect its core interests and how much sacrifice China could make. In economic coercion—more broadly economic statecraft—the basic intention is to achieve political goals with economic means, which suggests that by quantifying political goals in monetary terms, it is possible to estimate how much the attacker could sacrifice for political goals. This can be regarded as the *minimum* cost for the political resolve on a specific issue, which means that, if the EU retaliates, in the name of ACI, by means of coercion in response to China’s economic coercion, but inflicts less than the minimum cost, China would not acquiesce to EU’s demand and would not cease conducting the economic coercion; deterrence would not be materialised,

¹¹⁶ Avery Goldstein, “China’s Grand Strategy under Xi Jinping,” *International Security*, Vol. 45, No. 1, 2020, p. 187

¹¹⁷ Feng Zhaokui, “What Are China’s Core Interests?” *China US Focus*, October 21, 2014, <https://www.chinausfocus.com/foreign-policy/what-are-chinas-core-interests-2>.

because for China the cost is acceptable.

In order to assess the *minimum* cost of political resolve for specific issues, I analyse past cases of economic coercion by China, from which it can be deduced, based on facts, how much cost of economic coercion China could actually bear for political goals. This quantification, of course, does not cover all issues. First, it overlooks quality. As Hunter et al. (2023) show, coercive measures can be employed in the following ways: trade restriction; investment restriction; tourism restriction; boycott; state-issued threat; arbitrary detention or execution; sanction on individuals; and cyberattacks. Some of these do not entail monetary cost. For example, sanctions on individuals hardly require cost. This does not mean that they do not indicate political resolve; rather this is an area where this quantification does not cover. Second, it is hardly possible to precisely capture the cost of economic coercion for the coercer due to the timeframe involved and invisible costs. As shown below, for example, China suspended broadcasting football games as a retaliatory measure. China paid for the right to broadcast the games based on a contract, which can be quantified, but it is difficult to ascertain sponsor fees and expected ad revenues, which can be considered as opportunity costs for China. Additionally, as to trade restriction, it is difficult to determine if the effect would linger for several years.

The present quantification does not address the points discussed above. Conversely, this means that estimated costs described in the following section are the *minimum* costs that China shouldered in implementing economic sanctions. Again, this is not designed to identify unacceptable damage, but rather to estimate the minimum cost in order for ACI to work. In the following section, I analyse 4 cases to quantify the monetary costs for political resolve on each issue.

4-1 Quantified Political Cost for China

4-1-1 Case; UK

On December 13, 2019, Mesut Özil, a famous football player in one of the most prestigious football teams in the UK, Arsenal, tweeted a content criticising the government of China regarding human rights issues in Uyghur. Human rights issues are not part of China's core interests, but China expressed concern and retaliated against the tweet.

On December 15, 2019, China's nationalised TV broadcaster, CCTV, removed English Premier League football match programmes, including Arsenal's, from its schedule after the tweet, which was understood as retaliation. Since football games are popular around the world, including China, CCTV

acquired the rights to broadcast the game for 564 million pounds over three years.¹¹⁸ Reportedly, however, since China did not pay half of the money, the contract expired in 2020.¹¹⁹ Although China had already paid half, 282 million pounds, it suspended broadcasting even during the contract period. In August of 2022, CCTV resumed broadcasting the English Premier League.

The cost that China actually shouldered—282 million pounds—could be considered as a cost that China was willing to sacrifice for its economic coercion.

4-1-2 Case; Australia

It has been pointed out that issues such as disease, tougher laws addressing environmental issues, and an exodus of small-scale farmers have constrained China's meat supply, boosting domestic prices and incentives to import.¹²⁰ Traditionally, China has relied on beef imports to meet domestic demand.

In May 2020, China halted beef imports from Australia as a retaliatory measure against Australia's claim that an independent research on the origin of Covid-19 should be conducted. Due to the measure, Australian beef exports to China dropped 34% in 2020 compared to the previous year.¹²¹ At the same time, the value of US beef export to China increased by 260%.¹²² It can thus be assumed that even though China initially intended to pay the cost of coercion by halting import of Australian beef, China ultimately barely shouldered the cost, because it was mitigated by the increase in US beef import.

China imposed 80.5% tariffs in total on Australian barley in May 2021.¹²³ In August, 2023, China announced its will to drop the tariff.¹²⁴ It is a fact that in 2022 China's import of barley dropped by 42.3%, which seems to have been influenced by its own tariff measure. However, although there

¹¹⁸ Mitch Phillips, "Clubs unlikely to bite the Chinese hand that feeds," *Reuters*, December 17, 2019, <https://www.reuters.com/article/uk-soccer-arsenal-china-idUKKBN1YK26H>.

¹¹⁹ Gauresh Mahadik, "CCTV Acquires Media Rights of Premier League for Three Seasons," *Sportsmint*, August 2, 2022, <https://sportsmintmedia.com/cctv-acquires-media-rights-of-premier-league-for-three-seasons/>.

¹²⁰ "China remains the world's largest meat importer despite recent declines," US department of Agriculture, July 27, 2023, <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=106996>.

¹²¹ Michael Smith, "Supply disruption to China gives hope to Australian beef exporters," *Financial Review*, October 20, 2021, <https://www.afr.com/world/asia/supply-disruption-to-china-gives-hope-to-australian-beef-exporters-20211020-p591kg>.

¹²² "Beef 2020 Export Highlights," U.S Department of Agriculture, access granted on August 22, 2023, <https://www.fas.usda.gov/beef-2020-export-highlights>.

¹²³ Jonathan Barrett, Gus Trompiz, "Barley trade routes redrawn as China tariff hits Australian farmers," *Reuters*, November 17, 2020, <https://www.reuters.com/article/us-australia-china-barley-idUSKBN27X02T>.

¹²⁴ Peter Hoskins, "China drops Australia barley tariffs after three years," *BBC News*, August 4, 2023, <https://www.bbc.com/news/business-66402220>.

seem to be seasonal differences in import volume, it is not clear if the trade volume had been affected by the tariff measure.

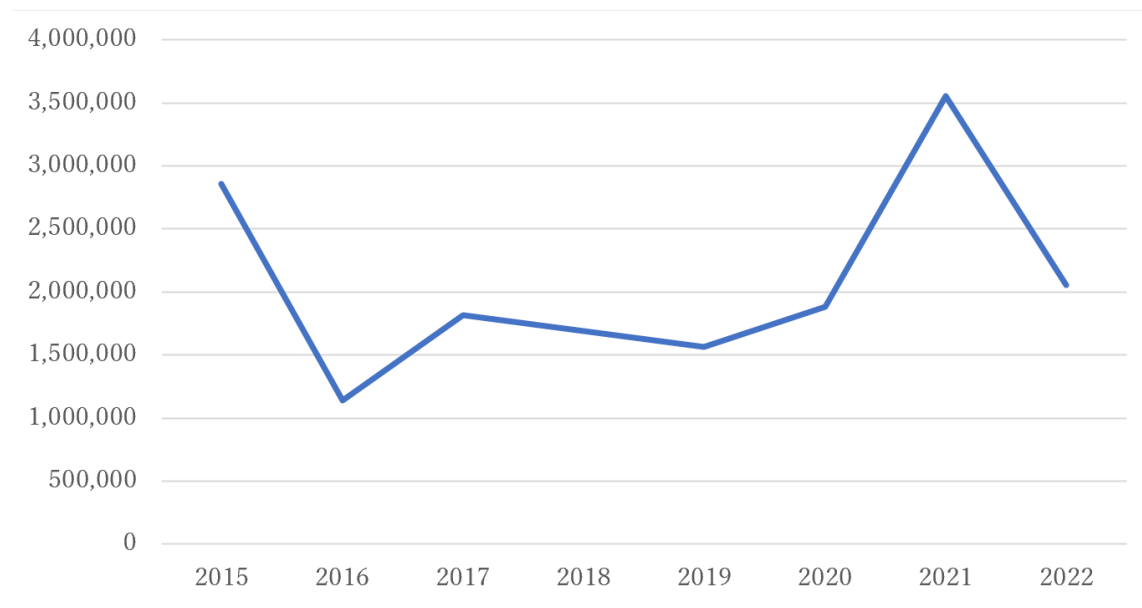
fig.1 monthly data on China's import of barley (in US dollar base)



Source; “Value table of major imported commodities (进口主要商品量值表),” General Administration of Customs of People's Republic of China

In addition to the monthly data, fig. 1 shows the yearly data. Interestingly, one can see that import volume in 2021 was exceptionally high compared to the previous 5 years during which the import volume had been almost flat. While it should be noted that the tariff measure commenced in May, i.e., in the middle of the year, so it may not be reflected on the yearly data, the import volume in 2021 is higher than the other years, even under the tariff measure taken. In reaction to the peculiarity of 2021, the import volume in 2022 dropped by 42.3% compared to the previous year.

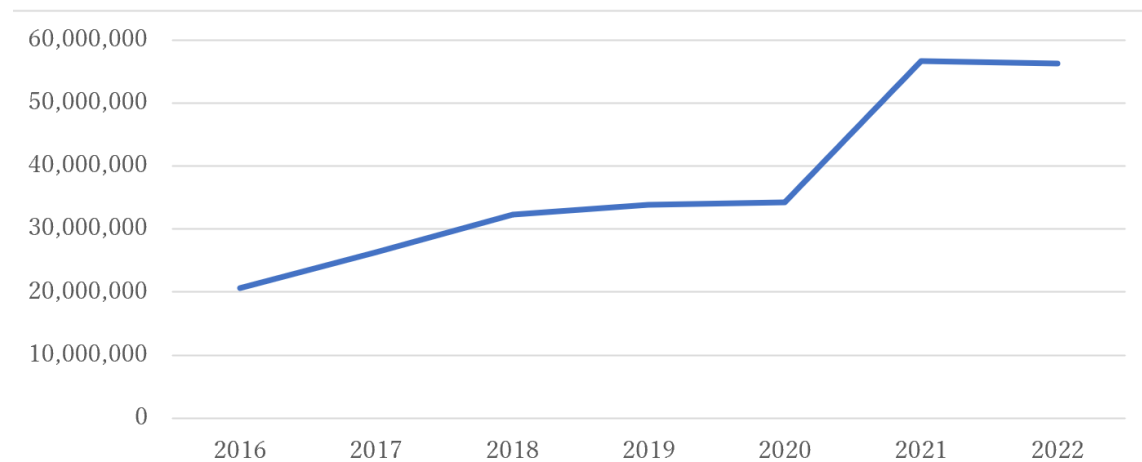
fig.2 yearly data on China's import of barley (US dollar base)



Source; “Value table of major imported commodities (进口主要商品量值表),” General Administration of Customs of People’s Republic of China

China reduced import of copper concentrate from Australia, which eventually reached zero at the end of December 2020.¹²⁵ Yet, copper import from Australia did not affect the total volume of import; as fig.2 shows, China gradually augmented its import volume of copper even during the trade suspension with Australia.

fig.3 yearly data on China’s import of copper (US dollar base)



Source; “Value table of major imported commodities (进口主要商品量值表),” General

¹²⁵ Tom Daly and Emily Chow, “China’s imports of Australian copper ore crashed to zero in December,” *Reuters*, January 20, 2021, <https://www.reuters.com/world/china/chinas-imports-australian-copper-ore-crashed-zero-december-2021-01-20/>.

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The three items discussed above illustrate that, although China suspended import on specific items, China is capable of increasing the total trade volume by means of alternative trade. It is thus evident that China did not expend monetary costs for the political resolve in the Australian case.

4-1-3 Case; South Korea

In July 2016, the United States and South Korea announced that they would deploy the THAAD system in South Korea. THAAD is a defence system, which does not threaten China, but, as the government of South Korea explained, was necessary for South Korea to hedge the threat of North Korea, which has conducted several nuclear tests despite being sanctioned. China, on the other hand, perceived THAAD as a threat to China, as it would reduce the missile capability of China. In this context, in 2017, China took retaliatory measures against South Korea in response to the deployment.

First, after the THAAD announcement, several K-pop star tours were cancelled in the subsequent months. Second, in March 2017, Chinese authorities ordered travel agencies to halt package tours to South Korea. Third, in April of the same year, Lotte stores, one of the largest South Korean conglomerates, were ordered to halt operations in China by Chinese authorities, for violating safety requirements. These measures obviously could have inflicted costs on South Korea's economy. It also can be ascertained that regular citizens in China were forced to restrain from some activities, such as attending K-pop tours. Substantially, around 13,000 workers in Lotte stores could not obtain their salary during the closure period mandated by the order.¹²⁶ Additionally, it is estimated that around 10 million people in China were affected by the halting of package tours to South Korea.¹²⁷

It is, however, clear that the government of China did not bear the cost of implementing economic sanctions against South Korea, so this case could be regarded as having been cost-free for China.

4-1-4 Case; Norway

On October 8, 2010, a Nobel Prize was awarded to Liu Xiaobo for his long and non-violent struggle

¹²⁶ Jung Min-hee, "Lotte Faces 500 Billion Won Losses in China over THAAD Retaliation," *BusinessKorea* May 8, 2017, <https://www.businesskorea.co.kr/news/articleView.html?idxno=18007>.

¹²⁷ Echo Huang, "China inflicted a world of pain on South Korea in 2017," *Quartz*, December 21, 2017, <https://qz.com/1149663/china-south-korea-relations-in-2017-thaad-backlash-and-the-effect-on-tourism>.

for fundamental human rights in China.¹²⁸ Since he had been a dissenter for the government of China, this award angered the country, which triggered retaliatory actions. In the following days, the Chinese cancelled a meeting with the Norwegian fishery minister that was to be held in Shanghai.¹²⁹ As a substantial measure, China inconspicuously suspended importing Norwegian salmon.¹³⁰ As a result, Norway's export of salmon to China is reported to have dropped 59% in 2011 compared to the previous year¹³¹.

Kolstad (2020) estimates the effect of Chinese sanctions on Norwegian salmon export to China using a synthetic control approach. In this approach, one is allowed to compare the target country (in this case Norway) with a synthetic control country that is created as a weighted average of other countries drawn from the total 'donor pool' of all countries.¹³² This creates a counterfactual scenario, which permits one to demonstrate the effect of the imposition of economic sanctions by China by comparing the counterfactual scenario with reality.

According to the estimation described above, Norwegian salmon export to China dropped by at least 125 million US dollars and at most 176 million US dollars between 2011-2013. In Kolstad's (2020) paper, the loss of trade volume is not mentioned, but it can be estimated to have been 9,500 tons to 13,400 tons.¹³³

¹²⁸ "Liu Xiaobo," the Nobel Prize, access granted on October 23, 2023, <https://www.nobelprize.org/prizes/peace/2010/xiaobo/facts/>.

¹²⁹ Sharon LaFraniere, "Chinese Cancel Meeting With Norwegian Minister," *the New York Times*, October 11, 2010, <https://www.nytimes.com/2010/10/12/world/asia/12china.html>.

¹³⁰ Mark Lewis, "Norway's salmon rot as China takes revenge for dissident's Nobel Prize," *Independent*, October 6, 2011, <https://www.independent.co.uk/news/world/europe/norway-s-salmon-rot-as-china-takes-revenge-for-dissident-s-nobel-prize-2366167.html>.

¹³¹ Andrew Higgins, "In Philippines, banana growers feel effect of South China Sea dispute," *the Washington Post*, June 10, 2012, https://www.washingtonpost.com/world/asia_pacific/in-philippines-banana-growers-feel-effect-of-south-china-sea-dispute/2012/06/10/gJQA47WVTV_story.html.

¹³² Ivar Kolstad, "Too big to fault? Effects of the 2010 Nobel Peace Prize on Norwegian exports to China and foreign policy," *International Political Science Review*, Volume 41, Issue 2, March 2020, p. 212

¹³³ According to an official statistic from the General Administration of Customs of the People's Republic of China, seafood is categorised into two types; raw fish (食用水产品) and frozen fish (冻鱼), which is why it is not possible to specify the import volume of salmon. Therefore, in order to bridge Kolstad (2020)'s estimation in US dollars with quantity (tons), which are comparable, I referred to two articles listed below to calculate what 1 ton equates to in US dollars; "Norway's salmon exports to China up 67 pct in 1H by volume," *Xinhua*, July 5, 2023, <https://english.news.cn/20230705/aaa2ed7f18d64a56b227071749b06392/c.html>; Louis Harkell, "China's seafood imports surge to \$19bn in 2022 despite COVID lockdowns," *China Fisheries & Seafood Expo*, April 12, 2023, <https://chinaseafoodexpo.com/chinas-seafood-imports-surge-to-19bn-in-2022-despite-covid-lockdowns/>. Then, based on each article, the tons/price ratio can be calculated as follows: 10,720 tons/ 125 million dollars; and 8,317 tons/125 million dollars, which are averaged

The import volume of salmon in China cannot be verified, but is estimated to be around 500,000 tons annually.¹³⁴ Reportedly, Russian salmon export to China in 2011 increased by approximately 98,000 tons¹³⁵ at the same time as when Norwegian export dropped. Due to lack of data, it is impossible to assess the precise effects on Chinese salmon import, but based on the above, it can be predicted that China was hardly damaged by triggering its economic sanction towards Norway, by mitigating the damage by increasing Russian import. As summarised in Table 1, China obviously has hardly paid the costs of triggering economic coercion, mostly mitigated by trading partners. In the UK case, China paid substantial costs for counteracting against a single tweet of a football player, despite human rights issues not being its core interest. Moreover, the import prohibition of Australian beef was offset by an increase in US beef, despite the fact that the United States is an ally of Australia.

In the following section, I discuss what these cases symbolize in deterring China's economic coercion as intended by the ACI.

Table.1 Summary of estimated damages incurred by China by implementing economic coercion

	UK	Australia			South Korea			Norway
Sanctioned items	Football games	Beef	Barley	Cooper	K-pop tour	Lotte store	Travel to SK	Salmon
Estimated damage for China	282 million £	Offset by the US	Cannot be confirmed	Cannot be confirmed	unconfirmed	Around 13,000 employees temporally unpaid	Around 10 million people affected by the halt	Offset by Russia

4-2 Implication of Cases

As shown above, it can be deduced that China essentially has not borne costs due to its economic sanctions, which suggests that China has not sacrificed economic benefits when implementing economic sanctions, despite Baldwin's (2020) argument that the cost of economic coercion tends to be burdensome for the target corresponding with its resolve.

The foregoing can be interpreted as follows. First, China is more sensitive to costs than had been anticipated. This is in accordance with what Zhang (2019) argues in the Norwegian case, namely that

to obtain 9,518 tons/ 125 million dollars, then rounded to 9,500 tons/ 125 million dollars. The ratio 13,400 tons / 176 million dollars was calculated in the same manner.

¹³⁴ David Hayes, "Norway increases salmon exports to China," *World Fishing*, February 14, 2013, <https://www.worldfishing.net/norway-increases-salmon-exports-to-china/106874.article>.

¹³⁵ "Russian salmon exports up 64%," *IntraFish*, February 1, 2012, <https://www.intrafish.com/news/russian-salmon-exports-up-64-/1-1-490856>.

China is highly calculative and risk-averse. As mentioned above, while China has been thought to aggressively defend its core interests, which seem to outweigh economic benefits, the aforementioned interpretation does not necessarily support Zhang's argument. Second, China has conducted economic coercion mainly to signal that it does not intend to force the target to change its behaviour. As argued below, there are some sectors that China did not include in its lists of economic sanctions, despite the likelihood that it would inflict massive economic damage to the target. In this sense, China has chosen sectors for economic coercion in an ostentatious manner, regardless of economic effect. What is behind this is that China is not concerned less about the effects of economic coercion than it had been thought ; rather, China's aim is signalling. Zhang (2019) also argues that Chinese sanctions are, by and large, symbolic and serve as a signalling device.¹³⁶

On the other hand, it is worth noting that there have been several items that China did not include in import control, despite their potential to inflict immense damage on the target. For example, China did not include iron ores, despite its import volume being 103.5 billion Australian dollars in 2022,¹³⁷ in comparison with coal, which was around \$14 billion in 2019.¹³⁸ Additionally, China did not trigger trade restrictions against South Korea in the THAAD case, despite most of the trade consisting of electronic goods.

The facts described above imply the following two points. First, China left the items out as a "last resort" of economic coercion. If the target acquiesces before triggering trade restrictions, that would be near optimal for China, because it will be able to avoid shouldering large costs in implementing economic sanctions. In this sense, it might not be wise to trigger substantial measures at the first stage. Second, China could not have afforded to shoulder the costs of banning these items. Halting the import of these items would have brought unaffordable damage to the targets as well as to China. Given their importance to China, it was not realistic for China to conduct embargoes on these items.

Since one cannot test causal relationships between the excluded items and China's intent, in a manner allowing plausible interpretations, it is impossible to entirely reject the last resort hypothesis. However, taking into account both interpretations of China's economic coercion—that it is designed for

¹³⁶ Ketian Vivian Zhang, "Chinese non-military coercion -Tactics and rationale," *the Brookings Institution*, January 22, 2019, <https://www.brookings.edu/articles/chinese--non--military--coercion--tactics--and--rationale/>.

¹³⁷ "Fact sheets for countries, economies and regions, China," Department of Foreign Affairs and Trade, Australian Government, access granted on October 18, 2023, <https://www.dfat.gov.au/sites/default/files/chin-cef.pdf>.

¹³⁸ Bill Birtles, "China increasingly expected to drop ban on Australian coal as nation's economic woes deepen," *ABC News*, July 16, 2022, <https://www.abc.net.au/news/2022-07-15/china-increasingly-expected-to-drop-ban-on-australian-coal/101242670>.

signalling and that it is sensitive to costs—one may deem it more plausible that China was not able to afford the costs, rather than it save them as a last resort.

This is precisely what China cannot afford, which can be regarded as unacceptable damage for China. By analysing excluded items despite their massive importance in trade, it may be possible to estimate China's unacceptable damage. As Suzuki (2023) argues, since this could be a choke point for China, it is imperative for the ACI to incorporate them to be effective.

In order to identify China's unacceptable damage, I referred to trade statistics to find the trade volume of items. The sources of the trade statistics are the following: the General Administration of Customs of the People's Republic of China; Korea Customs Service; and Australian Bureau of statistics. In order for them to be comparable, the unit is standardised to US dollars. Statistics of China and South Korea have been shown in US dollars, whereas the Australian numbers are shown in Australian dollars. In this paper, the Australian dollar is converted into US dollars, using the conversion rate of 1 US dollar = 1.43 Australian dollars, based on a 5-year average.

With respect to item categories, the original data are comparable in most, but not all, parts. For example, in Australian statistics, alumina is included in the Aluminium category, whereas in Chinese statistics, it is not. Yet, due to the limited volume of China's alumina import, it is safe to regard this gap as marginal. It is worth noting that despite the importance of lithium having been voiced, it is out of scope of this work, given the lack of data in official statistics. Fortunately, data of integrated circuits are comparative between South Korean statistics, classified using HS code, and Chinese ones (集成电路). It is also worth noting that trade statistics can only show the trade volume, and is unable to explain unacceptability in terms of quality. Particularly, integrated circuits, or semiconductors require high quality to be indispensable. In order to argue the quality of items, I refer to micro qualitative data from companies.

4-3 Unacceptable Damage for China

4-3-1 The Australian Case

It has been pointed out that the PRC is less likely to target Australia's mining or energy sectors because the economic pains for China would be large.¹³⁹ Given the importance of Australia as a commodity

¹³⁹ Fergus Hunter, Daria Impiombato, Yvonne Lau and Adam Triggs, Albert Zhang and Urmika Deb, "Countering China's coercive diplomacy Prioritising economic security, sovereignty and the rules-based order," *Australian Strategic Policy Institute*, Policy Brief Report, No. 68, February 2023, p.29

supplier, materials supplied by Australia are also important for China.

Unlike advanced technologies, such as semiconductors, the quality of commodities does not vary greatly, which means that the quality of Australian aluminium and iron does not help retain China's import from Australia. Yet, there is a limited number of countries that can produce them, which suggests Australia's importance will remain as long as Australia produces them, regardless of the quality.

Indeed, China did not include aluminium and iron when it implemented economic sanctions on Australia. For example, in 2018, prior to the economic sanction, China imported 2,701.4 million US dollars of aluminium, of which Australia's export accounted for 30.6%, whereas in 2022, during the economic sanction, Australian aluminium accounted for 15.4%. Even if China had reduced the Australian import share by half, it is thought of as being the result China almost doubling its import of aluminium between 2018 and 2022 (2,701 million dollars to 6,752 million dollars). Evidently, the value of Australian export itself has increased in absolute terms (827 million dollars to 1,041 million dollars).

As to iron, China's total import was 75,539 million dollars in 2018, of which Australia accounted for 43.1%. In 2022, on the other hand, Australian iron accounted for 54.8%, even under economic sanctions, which suggests that, although China conducted trade restrictions on some items, such as coal and barley, China continued to import iron from Australia; indeed, the import volume and share increased.

Mining materials depend on geography, which suggests that producer countries are set. As to aluminium, its raw material bauxite are found in the countries below: Guinea (25%); Australia (20%); Vietnam (12%); Brazil (9%); and Jamaica (6%),¹⁴⁰ which suggests that China is not a producer country, but it is the largest consumer. On the other hand, iron is found in the following countries: Australia (29%); Russia (17%); Brazil (14%); China (9%); and India (6%).¹⁴¹ Even though China is a producer, it is an importer as well, given the massive domestic demand that outweighs its domestic production.

To overcome this limitation, China has strived to partner with producer countries. For example, China

¹⁴⁰ "Material flow 2018," Japan Organization for Metals and Energy Security, March 2019, p.365, https://mric.jogmec.go.jp/wp-content/uploads/2019/03/material_flow2018_A1.pdf. (in Japanese)

¹⁴¹ Ibid, p.340

has partnered with Guinea to explore Simandou, one of the biggest iron areas in Africa.¹⁴² Meanwhile, it is said that iron from Simandou is of high quality with few impurities, and that the total production is expected to be low. Furthermore, exploring there entails constructing infrastructure that makes production affordable.

Again, lithium is out of scope of this research, but Chinese firms have commenced operations in Latin America.¹⁴³

Based on the points described above, it can be inferred that mining materials, particularly aluminium and iron, would be unacceptable damage for China, given that China did not cease import even during trade restrictions. It should be remarked that, although China has strived to mitigate its dependence on Australia, partnering with producer countries, such as Guinea, it is predicted to be insufficient due to limited capacities and because it will take a long time to construct infrastructure. It is thus concluded that these choke points will remain unacceptable damage for the long term.

4-3-2 The South Korean Case

As discussed above, China implemented economic sanctions against South Korea in response to deployment of the THAAD system. Given that the deployment could not be easily stopped or withdrawn in terms of cost and physical construction, it can be understood that China conducted economic sanctions with the aim of signalling, not necessarily caring about effect. It is also thought that China may have attempted implementation in a gradual manner, saving the most effective tool as a last resort.

In terms of effect, it is logical to restrict import on the most traded items, i.e., integrated circuits or semiconductors. According to an estimate, integrated circuits account for 30.5% of all trade, marking the highest share in the bilateral trade in 2021.¹⁴⁴

In 2018, China imported 312 billion US dollars of integrated circuits, of which South Korea accounted for 14.8%. It should be noted that China did not implement trade restrictions on integrated circuits, so

¹⁴² Ken Moriyasu, “China to develop Guinea in earnest, aiming to procure iron ore and leave Australia,” *Nikkei*, August 23, 2023, <https://www.nikkei.com/article/DGXZQOCB171JA0X10C23A8000000/>.

¹⁴³ See, Daisuke Hyodo, “Chinese Companies' Expansion of Lithium Resources in South America,” Japan Organization for Metals and Energy Security, August 8, 2023, <https://mrjc.jogmec.go.jp/reports/current/20230808/178500/>. (in Japanese)

¹⁴⁴ “South Korea to China,” The Observatory of Economic Complexity, access granted on October 29, 2023, <https://oec.world/en/profile/bilateral-country/kor/partner/chn>.

that it is not possible to compare the before/after effect of the economic sanction; however, even in 2022, when the United States tightened export control regarding dual-use technology, including semiconductors to China, given market needs, China augmented the import to 381 billion US dollars, of which South Korea accounted for 12.8%.

Unlike commodities, the quality or technology does matter with semiconductors. If a quality that guarantees indispensability is lacking, China would not feel it unacceptable to sanction it, and would alternatively trade with TSMC or other foundry companies that can produce and offer chips.

Regarding quality, South Korea cannot sufficiently retain China as a unique partner because, basically, Samsung, the South Korean giant, is a foundry company that produces chips as an OEM. Samsung is privileged in terms of massive investments on production facilities, yet it does not process its core technology, which comes from design companies. Even though SK Hynix, the second biggest player in this field, has reportedly developed the most advanced 321-layer NAND chip, which is used for data storage for long-term,¹⁴⁵ it is unlikely that this chip would help deter China's economic coercion.

Since the production of semiconductors requires massive costs and equipment, even if South Korea does not have core technology, it can take advantage of production. In order to enhance this advantage, the Korean government has announced to invest an unprecedented 450 billion US dollars by 2030.¹⁴⁶ Additionally, South Korea has strived to make a cluster of semiconductors, incentivising foreign firms, such as Applied Materials and ASML, to establish R&D centres with tax benefits.¹⁴⁷

Yet, there are some points that may diminish the advantages. First, Samsung has been left behind TSMC in OEM production. Accordingly, OEM shares in April to June of 2023 was 59.6% for TSMC and 12.3% for Samsung.¹⁴⁸ Furthermore, Samsung incurred deficits in major semiconductor fields,

¹⁴⁵ Shintaro Hosokawa, "SK Hynix to Develop Cutting-Edge 321-Layer NAND Memory," *Nikkei*, August 9, 2023, <https://www.nikkei.com/article/DGXZQOGM091WV0Z00C23A8000000/#:~:text=%E3%80%90%E3%82%BD%E3%82%A6%E3%83%AB%3D%E7%B4%B0%E5%B7%9D%E5%B9%B8%E5%A4%AA%E9%83%8E%E3%80%91%E9%9F%93%E5%9B%BD,%E5%B9%B4%E4%B8%8A%E5%8D%8A%E6%9C%9F%E3%81%AB%E9%87%8F%E7%94%A3%E3%81%99%E3%82%8B%E3%80%82>. (in Japanese)

¹⁴⁶ Kim Jaewon, "South Korea plans to invest \$450bn to become chip 'powerhouse'," *Nikkei Asia*, May 13, 2023, <https://asia.nikkei.com/Business/Tech/Semiconductors/South-Korea-plans-to-invest-450bn-to-become-chip-powerhouse>.

¹⁴⁷ Shintaro Hosokawa, Nami Matsuura "Samsung's "30 Trillion Yen" Seductive Force: Major Semiconductor Equipment Companies Establish South Korean Facilities One after Another, Aiming to Improve Development Efficiency," *Nikkei*, May 24, 2023, <https://www.nikkei.com/article/DGKKZO71268040T20C23A5FFJ000/>. (in Japanese)

¹⁴⁸ Shintaro Hosokawa "Samsung Semiconductor: Recovery Far Away, 400 Billion Yen Loss in

such as DRAM (44.1 billion yen), NAND (298.1 billion yen), and non-memory chips (77.2 billion yen) in the third quarter of 2023.¹⁴⁹ Given that demand for semiconductors is volatile, it is uncertain if this trend would continue; however, it is now a dampening factor. Second, China has tried to overcome this disadvantage, by leveraging its economic power. It has been said that China has offered high salaries to hire semiconductor engineers. This reflects a proper market mechanism which rejects intervention. Unofficially, however, China employed economic espionage. In June 2023, former executives of Samsung were arrested on charges of leaking a drawing of a semiconductor factory to China.¹⁵⁰

Based on the discussion above, South Korea's integrated circuits could be unacceptable damage for China to some extent, given their share in the bilateral trade. Nonetheless, the advantage of South Korea in the semiconductor field has relied on massive investments and facilities, all of which can be theoretically replicated with enough money. Furthermore, there are negative points for South Korea that diminish its advantages. It is thus concluded that integrated circuits could be unacceptable damage for China now, but it may not last long.

4-4 Application to ACI

As discussed above, it may be possible that some items constitute unacceptable damage to China, which would help deter Chinese economic coercion. However, not all of those items are available to the EU, given that the commodity market is oligopolistic. On the other hand, there may be other items that Australia cannot leverage but that the EU can. Therefore, it is necessary to argue to what extent the EU could leverage the above-mentioned unacceptable damage and reshape the scope of implementing ACI.

Due to geographical limitations, EU countries cannot produce mining materials in the same manner as Australia. In order to apply the discussions above to ACI, it is necessary to focus on semiconductors

July-September, Sluggish Demand / Time to Expand Outsourcing Memory," *Nikkei*, October 12, 2023, <https://www.nikkei.com/nkd/company/us/WDC/news/?DisplayType=1&ng=DGKKZO7518307011102023FFJ000>. (in Japanese)

¹⁴⁹ Ibid,

¹⁵⁰ Shintaro Hosokawa "Semiconductor Technology Leaked out of China South Korean Prosecutors Indict Former Samsung Managing Director and Others, Obtaining Plans to Build a Plant by Obtaining Drawings and Pimping Out 200 Engineers," *Nikkei*, June 14, 2023, <https://www.nikkei.com/article/DGKKZO71859520T10C23A6FFJ000/#:~:text=%E3%80%90%E3%82%BD%E3%82%A6%E3%83%AB%3D%E7%B4%B0%E5%B7%9D%E5%B9%B8%E5%A4%AA%E9%83%8E%E3%80%91%E9%9F%93%E5%9B%BD,%E3%82%92%E6%8E%A1%E7%94%A8%E3%81%97%E3%81%A6%E3%81%84%E3%81%9F%E3%80%82>. (in Japanese)

like South Korea.

The EU has been left behind in the semiconductor market, compared with the United States and Asian countries. Yet, ASML, a Dutch giant, is the only company that has succeeded in producing an EUV lithography system that is required for nano-edge cutting. This means that if China wishes to produce its own advanced chips, they inevitably must obtain an EUV lithography system from ASML. Since ASML has monopolised this area, this could be a choke point for China, and thus be unacceptable damage.

However, as discussed in the South Korea section, China has now leveraged its economic power to catch up with production facilities by hiring engineers with high salary offers and economic espionage. Even though the United States and its allies have conducted export control against China, they could not completely prevent China from acquiring the technology, due to their hiring and equipment smuggling practices. In cases where choke points cannot be employed, it is worth debating whether large-scale costs, such as what the United States threatened in its trade war with China, would be possible. As described above, China has barely paid the costs for its political will, regardless of whether it constituted its core interest, which suggests that China may be risk-averse and cost-sensitive more than previously thought. It is therefore conceivable that large-scale economic damage would be effective when choke points cannot be employed.

The hurdle for the EU to implement a 92-billion-euro (100 billion dollar) tariff is slightly lower than for the United States, given that the EU's import volume from China in 2022 was 619 billion euros, whereas that of the United States was 536 billion dollars.¹⁵¹ However, the cost burden allocation of each country was disproportionate, when calculated by weighted average, wherein the Netherlands accounted for 22.4% and Germany accounted for 21.0%, whereas Lithuania, who triggered China's economic sanction, accounted for 0.3%. Moreover, since the most traded items are automobiles, and automobile parts, these two countries would inevitably bear much of the cost of tariff measures. This suggests a critical issue: free riders. In this scenario, smaller countries like Lithuania, as they hardly bear the costs, would be incentivised to challenge China in pursuit of profit maximisation. If cost allocation is well designed, smaller countries would eschew such jeopardising behaviour. It can be predicted that, given this trade share and items, it would be impossible to prevent free riders from

¹⁵¹ "China-EU - international trade in goods statistics," Eurostat, November 6, 2023, access granted on November 20, 2023, [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=China-EU - international trade in goods statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=China-EU_-_international_trade_in_goods_statistics). ; "US Trade with China," US Department of Commerce, April 24, 2023, access granted on November 20, 2023, <https://www.bis.doc.gov/index.php/country-papers/3268-2022-statistical-analysis-of-u-s-trade-with-china/file>.

emerging.

Remarkably, in July 2023, the German government released “Strategy on China”, which is designed for “de-risking”, rather than “decoupling”, and stipulates “companies must take geopolitical risks sufficiently into account in their decision-making. The costs of concentration risks must be more strongly internalised on the part of companies so that state funds do not have to be tapped into in the event of a geopolitical crisis.”¹⁵² This suggests that the cost incurred by companies involved in ACI would not be compensated, even if the cost is projected to be disproportionate between countries.

As stated above, the EU has yet to express its political resolve for triggering ACI. However, judging from the statement in “Strategy on China,” it is conceivable that Germany would lean toward risk-aversion, which would be a hurdle in expressing the EU’s resolve. In addition to the free rider issue mentioned above, a plausible German attitude towards cost would make it quite hard to reach a consensus, which is necessary since the EU has sret a unanimous vote system regarding foreign affairs and military decisions. Even if most countries in the EU agree to impose a tariff measure, if a single country, such as Germany, disagrees, the EU would be unable to take action.

Moreover, it is not clear that EU leaders would have as much resolve as Trump, who consistently contended to reduce the trade deficit with China since during his campaign. Given these issues, the EU would thus be required to demonstrate more political resolve than Trump, to secure a unanimous vote. In conclusion, in order for ACI to work, in the short term, since integrated circuits have maintained the highest share in the bilateral trade between South Korea and China, semiconductors, or, more precisely, the EUV lithography system monopolised by ASML, could be an unacceptable damage for China. In the long term, on the other hand, it is unlikely that the EUV lithography system would remain the choke point for China because China has strived to catch up with the technology in official and unofficial manners.

Concerning large-scale damage, as practiced by the United States, although the burden of the EU as a whole is less than that of the United States, given the disproportionality of trade between countries and the low possibility that the German government would compensate for the costs, it is plausible that companies in Germany and the Netherlands would be disproportionately burdened. Furthermore, as argued in the previous Chapter, since the EU would be incapable of laying down sufficient penalties for non-compliance, it is likely that these companies would not comply with the ACI, based on a cost/benefit analysis, which would eventually lead to a failure in inflicting unacceptable damage to

¹⁵² “Strategy on China,” the Government of the Federal Republic of Germany, July 13, 2023, <https://www.auswaertiges-amt.de/blob/2608580/49d50fecc479304c3da2e2079c55e106/china-strategie-en-data.pdf>.

China.

Chapter 5 Conclusion & Discussions

Throughout this paper, I argue that, if ACI would work as deterrence against China, the main focus should be on credibility and unacceptable damage. Due to spatial limitations and the need to focus on the main discussion, I could not cover some important points of discussion. Here are those points.

5-1 Further Research Required

In this paper, I only focus on China as a target of ACI, but ACI is not designed to deter only China; rather, it is for “all forms of economic coercion”. The EU has been conscious of economic coercion from the United States as well. For example, the EU cares about extraterritorial sanctions often employed by the United States.¹⁵³ It is often the case that European companies have been victims of the sanctions. Furthermore, Russia has been a sanctioned country as well as sanctioning one; whether intentionally or not, from September 26, 2022, the Nordstream 2 gas pipeline has been dysfunctional¹⁵⁴, unable to supply gas to Europe. Even though the United States increased its supply of Liquefied Natural Gas (LNG) to the Europe,¹⁵⁵ Russia’s retaliatory measure has affected the daily lives of European citizens.

It would have been more comprehensive to argue for ACI as a tool for deterring economic coercion if these two countries were covered. However, given the increasing importance of how to tackle Chinese economic coercion and since the Lithuanian case was a reminder for the EU of its importance, it is appropriate to discuss how to deter China’s economic coercion.

5-1-1 Lithium

Due to lack of data, this paper does not cover lithium, despite its increasing importance in the global

¹⁵³ Leonor Hubaut, “Bruxelles muscle son arsenal de défense économique,” *le Figaro*, December 8, 2021 (in French)

¹⁵⁴ Nerijus Adomaitis, “Q+A What is known about the Nord Stream gas pipeline explosions,” *Reuters*, September 27, 2023, <https://www.reuters.com/world/europe/qa-what-is-known-about-nord-stream-gas-pipeline-explosions-2023-09-26/>.

¹⁵⁵ Solenn Paulic, “Washington veut réduire la dépendance des dépendances des européens au nucléaire russe,” *le Figaro*, April 5, 2023 (in French)

market, for example in Electric Vehicles (EVs). In response to climate change, the world is transitioning to EVs from conventional vehicles that consume petrol. Lithium is used in EV batteries, and thus is indispensable for manufacturing. It can be predicted that the demand for lithium will become higher than ever.

China is not exempt from requiring lithium, as it promotes EV production. Taking these circumstances into account, lithium likely has the potential to be a “choke point” for China, which is worth debate, as Australia is one of its major exporters. Subsequent research will hopefully cover this topic.

5-1-2 Financial Compensation

As mentioned in the stakeholder meetings, most of the private sector have been concerned about financial loss triggered by ACI. The EU has tried to assure the private sector, stating that the ACI is a “last resort” and that it would be implemented only if necessary.

It is of course unclear how much the financial compensation would be, which would depend on each case. However, it may be necessary to clarify how to fund or budget for the financial loss, which this paper does not cover. Unless it is clarified, China may think that the EU would be incapable of compensating for financial losses, and so that it would be less likely that the EU would actually implement the ACI, which would undermine China’s confidence towards the EU, and thus possibly failing to deter China.

On the other hand, it is worth reminding ourselves of the aim of ACI: deterrence, which suggests that retaliatory measures from the EU would not materialise, but rather that it would achieve deterrence by the *threat* of unacceptable damage. In this sense, it may not be necessary to argue how to compensate for financial loss because it would not materialise. However, once China thinks that the EU is incapable of carrying out retaliatory measures due to lack of financial compensation, it is possible that deterrence would not be achieved.

Again, this paper does not discuss how to compensate for the financial loss of the private sector, despite its influence on credibility. Conversely, this suggests that the EU has room to enhance its credibility by tackling this point.

5-1-3 Collective Defence

As argued above, it would be difficult for the EU to set penalties high enough to deter violations from

the private sector. Instead, it would have a consultation mechanism to *prevent* violations. Thus, it would be risky for the private sector to behave in pursuit of pure economic gain, which means it may violate the ACI based on cost/benefit calculation.

Furthermore, smaller countries may become target of China's economic coercion, as demonstrated in the Lithuanian case, and bigger countries like France and Germany would help them. In this situation, where there is a disparity in the sizes of countries, it may be difficult to maintain extended deterrence because it is difficult to offer benefits to bigger countries, so they are not incentivised to help others. Meanwhile, smaller countries are incentivised to become free riders, because of the protection from bigger countries. Tsuruoka (2022) casts doubt on the commitment of other states, pointing out that the scope of a report by ASPI was limited to the Five Eyes. Coordination is difficult in the EU, which consists of numerous countries.

Worse, as mentioned above, the ACI does not stipulate financial compensation, which suggests that even if companies in bigger countries, for example, Germany, sacrifice their profits for the sake of those in smaller countries, say Lithuania, the German companies would not be compensated. Meanwhile, the Lithuanian companies may profit by taking a political risk, such as trading with Taiwan.

I did not discuss this point in this paper, but it is crucial to the credibility of ACI. It is imperative for the EU to tackle this point.

5-2 Theoretical Implications

In the model proposed by Drezner (1999), which assumes "*the shadow of future*" and that countries prefer to have a reputation of being tough, states are concerned about expected subsequent conflicts. As described above, this model can result in either the status quo or a deadlock. At the status quo stage, a sanctioning country would decide to impose sanctions when a "*coercion condition*" is met.

For the United States, it was clear that the coercion condition was met, due to the high possibility of future conflicts with China. The United States has regarded China as a rival, not only in terms of economics but also in terms of the military and technology. Since the United States actually imposed economic sanctions, it can be inferred that the United States preferred to have a tough reputation. Although one could attribute this fact to Trump's own character, the United States did not allow a partial lift, such as allowing direct foreign investment of military-related firms. In this sense, the United States acted to enhance its tough reputation, as the model assumes.

Though this model assumes a preference for a tough reputation, a target country would of course acquiesce if the expected utility of acquiescence outweighs that of deadlock, i.e., when a “*concession function*” is met. When the expectation of conflict is low, the target is incentivised to acquiesce because a single act of acquiescence would not affect its reputation due to the low conflict expectation, whereas if the expectation remains high, it would be hard to acquiesce.

China does not fit the model. As described above, even though the conflict expectation was high between the two countries, China acquiesced to the United States’s demand. This suggests that China may not have preferred a tough reputation as the model assumes, which is remarkable and insightful because China has been regarded as country that takes a tough stance and that would protect its core interests regardless of costs; however, China did not fit the model that assumes a preference for tough reputation, meaning that China would not behave for the sake of a tough reputation. On the other hand, Niou and Lacy's (2004) model adds two assumptions: different preferences (resolute/irresolute); and uncertainty about each other’s preferences. As described above, the plausible outcomes can be categorised into five types. The fact that China acquiesced to the United States’s demand can be interpreted in the following two ways: coercer threatens economic sanctions, target does not comply, coercer imposes economic sanctions, and target capitulates; and coercer threatens economic sanctions, and target complies.

According to the former interpretation, as the model indicates, the target believes that the coercer is irresolute, which allows the target to withstand the first economic sanction because, from the target’s perspective, the coercer is irresolute and will not impose the second economic sanction. However, based on the fact that Trump had conveyed his political resolve to reduce trade deficit with China, it is unlikely that China regarded the United States as an irresolute coercer.

On the other hand, according to the latter interpretation, this can be achieved under conditions in which the target is compliant, the cost of compliance is low, and the cost of economic sanctions is high. It is safe to say that the cost of economic sanctions was high, as the United States threatened to impose 100-billion-dollar tariffs on Chinese goods. Even though China lifted tariffs on automobiles, as the cost of compliance—it is unclear whether this cost was low or not—this latter interpretation is more appropriate than the former, suggesting that China was not resolute but rather was compliant.

As to empirical studies, as Hufbauer et al. (2009) illustrate, the success rate for a modest policy change is 51% and the variable for cost on the target is significant for the success rate, which seems consistent with the fact that China acquiesced due to the scale of the United States’s coercion. Shin et al. (2008)’s research argues that economic sanctions cannot inflict costs on the target, but does not argue whether the cost would contribute to the success of economic sanctions. Consistent with Hufbauer et al.’s

(2009) analysis, it is possible to argue that if a sanctioning state is capable of inflicting costs and cutting off loopholes that circumvent economic sanctions, it is likely for the economic sanction to succeed.

5-3 Translation into Politics

Economic sanctions are to be employed in an economic manner to change political behaviour. It is the state that will decide whether it will change its behaviour due to economic sanctions, but the target that incurs damage is the private sector. When China threatened to suspend exporting rare-earth materials to Japan in 2011, it was the Keidanren, a major business association of Japan, that solicited the Japanese government to tackle this issue. This suggests the possibility that, had the Keidanren not yielded nor solicited, Japan may not have acquiesced to China's demand. This is where economic pressure is translated into political pressure that can compel a state to change its behaviour.

This translation described above is thus a determinant factor in the success of economic sanctions and even coercion. As Sato (2022) argues, if a target country is democratic, its citizens can receive a message from the sanctioning country and convey it to the leader, resulting in political change, whereas in the case of an authoritarian state, this mechanism would not work and political change would not be materialised.¹⁵⁶

Despite its importance, research on this above-mentioned point has been scarce. Many research projects are interested in how China employed economic tools to yield concession from other states. Particularly, Kastner and Pearson (2020) discuss the causal mechanism by which China's economic tie with other states is translated into influence abroad. However, there has been little focus on how economic pressure is translated into domestic politics of economic sanctions in China. This may reflect the fact that China has rarely been the target of economic sanction and coercion, which leaves the debate on whether economic coercion would be successful against China undiscussed. Although China has a massive economy and the capability to circumvent economic sanctions, ACI is designed to counteract when China coerces an EU nation. It is necessary to debate under what conditions economic pressure can be translated into political change.

Regarding lobby groups, as Kojima (2021) argues, lobby groups in China are similar to those of Japan, comprising companies and entrepreneurs in the same industry, who promote the interests of the

¹⁵⁶ Heigo Sato, "Theoretical approach on economic statecraft," *International Relations*, vol. 205, February 2022, p. 19 (in Japanese)

industry.¹⁵⁷ On the other hand, it has been pointed out that relationships between government and lobby groups have resulted in unfair practices, such as monopolising licenses and distorting the market mechanism.

In November, 2013, the CCP decided to realize “genuine separation between lobbying groups and government agencies,” implementing concrete measures on the separation of financial assets. In July, 2015, however, China enacted a law reinforcing China’s control (領導) over lobby groups, by means of the CCP controlling the executive members of the lobby groups.

Therefore, it can be asserted that lobby groups in China have been separated from the government, preventing them from malicious conduct, but the CCP strengthened control over lobby groups, which means that they can be exerted influence, but cannot exert influence over the CCP.

Hou (2019) researched the relationship between the private sector and the state, arguing that entrepreneurs can protect their interests by being involved in local legislature. It has been pointed out that local officials seek bribes for the sake of their personal interests in return for providing opportunities. In China, it is often the case that governmental expropriation is conducted in a manner that disregards property rights of the private sector. Hou (2019) illustrates the causal relationship between involvement in local legislature and the extent of governmental expropriation, both quantitatively and qualitatively, and states that the protection is not a top-down approach but rather a bottom-up one, by means of invention and experimentation, as private entrepreneurs participate in the political institution.¹⁵⁸

However, it is worth noting that, even though the private sector can protect its interests by actively seeking opportunities, it is based on a hierarchical relationship between the state and the private sector. Although private entrepreneurs can be involved in local legislature, it is the central government that monitors local legislature and that can exert influence, while the opposite cannot be realized. This suggests that private entrepreneurs cannot exert influence on the central government, even if they were members of the local legislature.

In China, State-Owned-Enterprises (SOEs) are hard to identify because, as Hou (2019) points out, the ownership structure of Chinese companies is complex, and a large number of private firms “depend

¹⁵⁷ Kazuko Kojima, “The Magnetic Field of “Marketization” Policy Formation under the Xi Jinping Administration; Separation of industry associations from government agencies and a new type of pro-Qing (close but clean) political-commercial relationship,” the Japan Forum on International Relations, April 30, 2021, https://www.jfir.or.jp/studygroup_article/5871/. (in Japanese)

¹⁵⁸ Yue Hou, “the private sector in public office,” *Cambridge University Press*, 2019, p. 27

wholly or in part on investment or patronage by senior government officials”.¹⁵⁹ For example, Huawei is officially regarded as a private company, but it has been pointed out that the Chinese government intervenes in its operation, which is concerning to other states, resulting in the prohibition of the United States of Huawei products in government agencies.

Additionally, China enacted the National Intelligence Law, which stipulates in Article 7 that any organization or citizen shall support, assist and cooperate with the state intelligence work in accordance with the law, and keep the secrets of the national intelligence work known to the public.¹⁶⁰ This implies that the state has reinforcing authority over the private sector by ordering cooperation.

5-4 Escalation Dominance

As demonstrated in the United States’s credibility case, China acquiesced to the United States’s demand, threatened with a 100-billion-dollar tariff. The amount seems disproportionate to China’s behaviour, but it can be regarded that the United States was successful in achieving escalation dominance. Morgan (2003) argues that the best way to convey one’s will and intent is a combination of flexible response and escalation dominance. With this combination, at each level of the conflict, the deterrer would be able to do better than the challenger (escalation dominance) and thereby discourage the challenger from escalating.¹⁶¹ Regardless of whether this was flexible, the United States was able to respond to China’s behaviour better than China at every level.

Logically, the EU could be successful in deterrence by achieving escalation dominance. Yet, it has some issues. First, escalation dominance means that the escalation ladder is moved up, which suggests that, if deterrence fails with escalation dominance, the conflict would intensify or prolonged. In the US case described above, if deterrence had not been achieved with the 100-billion-dollar threat, China would have continued its behaviour and the United States would have implemented the tariff. Second, even though escalation dominance requires disproportionality, it requires proportionality to some extent as well. This may sound contradictory, though, as Reynolds and Goodman (2023) argue, moving up the escalation ladder would work only when retaliatory measures are proportionate to the threat. If the threat [of the retaliatory measures] is too extreme relative to the behaviour being deterred, the target will dismiss it as unrealistic,¹⁶² therefore failing in deterrence.

¹⁵⁹ Ibid, p.3

¹⁶⁰ “National Intelligence Law of the People’s Republic of China,” China’s Leader in Online Legal Search, access granted on November 6, 2023, <https://www.lawinfochina.com/display.aspx?id=23733&lib=law>.

¹⁶¹ Morgan, Ibid, p.18

¹⁶² Matthew Reynolds and Matthew P. Goodman, *ibid*, p. 31

It is therefore necessary for the EU to achieve escalation dominance with flexible response, accepting the escalation risks and guaranteeing that retaliatory measures are realistic. In circumstances in which some part of the private sector in the EU has expressed concern about escalation risk, as seen in the stakeholder meetings, the EU may need to express its political resolve to take on the escalation risks.

5-5 Conclusion

With respect to credibility, it is hard for the EU to assure credibility to China. Both the state and the government articulate their will, which enhances credibility. For the private sector, even though they agree on the concept of ACI, they are concerned about financial compensation. It can be predicted that the private sector would bear the costs when ACI is triggered. As argued above, the scope of financial compensation has been clarified, but it remains unclear how to fund the compensation, which requires legal and political justification. The EU is now capable of demonstrating its political will to confront economic coercion that targets EU entities, but it is also required to demonstrate its will for financial compensation.

It is concluded that the EU would be incapable of deterring violations of ACI by setting fines due to the proportionality thereof. In the AI Act, fines are set based on “a well-defined risk-based regulatory approach,” wherein what are regarded as high risk, corresponding to a high fine, are AI systems that pose significant risks to the health and safety or fundamental rights of persons. Logically, it seems impossible that a breach of ACI would equate to “significant risks to the health and safety or fundamental rights of persons.” Rather than fines, it is plausible for establishing a consultation mechanism to prevent breaches, such as prior consultation in EDPB.

It is true that China did not care about retaliation from the EU in the Lithuanian case, the United States while China acquiesced to the United States’s demand, and lowered tariffs on automobiles. Although there are several possible reasons why China acquiesced, such as unacceptable damage and moving up the escalation ladder, it is at least clear that China was confident of the United States’s political resolve, which means that the United States met the credibility criterion at that time. This is because the United States, or Trump himself, articulated their political resolve to reduce the trade deficit with China and actually carried out concrete measures, such as imposing tariffs on solar and aluminium; rhetoric followed by actions contributes to enhancing the credibility of one’s resolve.

Unlike the United States., at the present, the EU cannot gain China’s confidence to itself the United States. However, after the Lithuanian case, the EU has demonstrated its political resolve in the Russian economic sanctionsLithuanian case. Additionally, the EU has been incentivised to implement ACI

when necessary, in order not to undermine its credibility. Based on these points, it is conceivable that the credibility issue has been ameliorated, though it is not clear if it is sufficient to deter China.

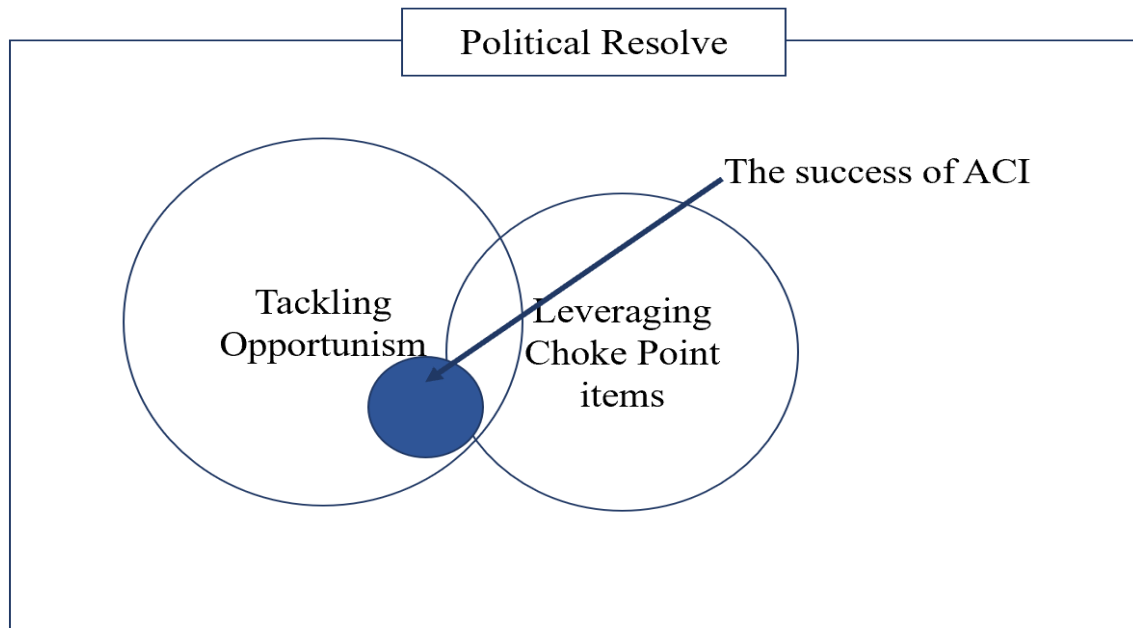
Concerning unacceptable damage, based on the assumption that China did not include some items because they were unacceptable damage for China, I analysed two cases. In the Australian case, China did not include aluminium and iron in the sanctions list, both of which continued to see increases in their trade volumes even under the sanctions, and thus can be understood as unacceptable damage. In the South Korean case, China did not restrict integrated circuits; however, it is worth noting that China did not conduct trade restrictions, which means that, unlike the Australian case, integrated circuits have not been tested if they would function as unacceptable damage. It can thus be inferred that aluminium, iron, and integrated circuits (semiconductors) are unacceptable damage for China.

In terms of application to the ACI, it is hardly possible for the EU to leverage commodities due to geographical limitations. In contrast, China has relied on the EUV lithology system of ASML, which could be employed as a choke point. It is nevertheless predicted that it would be difficult to maintain this choke point, because China conducts opaque economic espionage, as demonstrated by former executives of Samsung. At present, the EUV lithology system could be employed but it is not clear how long this situation would last.

Remarkably, based on each case of economic coercion by China, it can be asserted that China is risk-aversion-oriented, since China has virtually bore no costs in implementing economic coercion. In accordance with this risk-aversion, China acquiesced to the United States's demand by being threatened with 100-billion-dollar tariffs. It is hence inferred that the EU could inflict unacceptable damage by means of a disproportionate scale against China's economic coercion, even if it cannot employ choke points.

As a result, the image of ACI can be recast as follows.

Fig. 5 Image of success of ACI (recast)



However, there is a hurdle to achieving disproportionality; as Article 9-1 stipulates, any Union response measure shall not exceed the level that is commensurate with the injury suffered by the Union or a Member State due to the third country's measures of economic coercion, taking into account the gravity of the third country's measures and the rights in question.¹⁶³ This Article seems to prevent one from inflicting disproportionate damage, which is an obstacle at the present for unacceptable damage. In order to ensure unacceptable damage, the EU would be required to demonstrate its political resolve to take precedence over this Article and to address concerns from the private sector.

¹⁶³ European Commission, 2021/0406 (COD), December 8, 2021, p.19

Appendix

[March 2022]

Entity	Country	for/against	
American Chamber of Commerce to the EU	Belgium	for	<ul style="list-style-type: none"> ➤ The ACI should be seen as a measure of last resort, it should be WTO-compliant and implemented in coordination with other relevant countries and policies ➤ It should also include assessment and analysis of how businesses could be affected, to avoid unpredictability, uncertainty and escalation ➤ More detail and guidance is needed on what could constitute legitimate sovereign choices ➤ It should be defined more clearly to avoid unpredictability and legal uncertainty
BMW	Germany	for	<ul style="list-style-type: none"> ➤ Not being convinced that the existence of the instrument alone will be a sufficient deterrent and would expect this instrument ➤ Depending on third country companies not only for production materials, but also for their support in fulfilling important European policy measures by proving the reduction of our carbon footprint and adequate working conditions ➤ Introducing the ACI in the EU may well make full compliance impossible in the future ➤ The scope should also include unjustified sanctions on individuals and companies
AFEP	France		<ul style="list-style-type: none"> ➤ welcome the adoption of such initiative, meant to increase the resilience of the EU economy when confronted with economic pressures by trading partners ➤ the European Commission should be put in a

			position to consider whether it is worth maintaining EU countermeasures, repeal them or opt for further measures in case of harm to EU key interests.
Eurometaux	Belgium	for	<ul style="list-style-type: none"> ➤ Strongly welcoming this Anti-Coercion Instrument as an autonomous mechanism of the EU to deter and counteract coercive practices ➤ Designing the instrument in a way that it is predictable, proportionate, and does not impose additional burdens or costs (both direct and indirect) on EU economic operators ➤ Consulting stakeholders on their interests before taking any countermeasures ➤ Providing for compensation to EU businesses for the damage suffered due to the coercion
Business Europe	Belgium	for	<ul style="list-style-type: none"> ➤ Generally welcoming the Commission's proposal to introduce an EU instrument to protect the EU and the Member States from economic coercion by third countries ➤ It is critical that the EU's Regulation captures all types of coercion. ➤ The EU's response to economic coercion should be proportionate and targeted, to maximise the effectiveness of the instrument against economic coercion by a third country, while minimising the impact that EU measures could have on EU economic operators and EU interests
Anonymous			
Federation of German Industries	Germany	for	<ul style="list-style-type: none"> ➤ BDI agrees strongly that the European Union must have the tools to defend its interest in rules-based and, ideally, multilateral

			economic relations
			➤ BDI agrees that there must be a structured and targeted process to impose costs on those who would do away with multilateral principles and otherwise interfere in the legitimate sovereign choices of the European Union or its Member States.
			➤ Stressing that all measures applied need to be targeted, proportional, temporary and solution oriented. The deployment of the ACI should avoid a further escalation of trade conflicts.
European Branded Clothing Alliance	Belgium	??	➤ Recognising the negative impacts on competition and jobs, as well as on new business and investment opportunities and existing investments abroad
			➤ The best tools remain trade and investment measures in order to guarantee proportionality in the response.
			➤ Ensuring transparency in the process
Verband Deutscher Maschinen- und Anlagenbau e.V.	Germany	for	➤ Welcoming the Commission's proposal for the establishment of an Anti-Coercion Instrument
			➤ Micro-level actions are a strong burden for EU companies, but also have political consequences for EU Governments
			➤ Short-term financial losses are a big risk, before any counter measure might have a chance to take effect against the coercive measure.
Anonymous			
Australian Government	Australia	against	➤ Opposing the United States of economic coercion and discriminatory and restrictive trade practices
			➤ Such practices increase the risk and costs to

all businesses globally

EuroCommerce	Belgium	against	<ul style="list-style-type: none"> ➤ Concerning whether the proposed design will be an effective deterrence against coercive measurements from certain third countries ➤ There is a substantial risk that the implementation of the initiative could have a negative impact on the international trading system ➤ The scope of any countermeasures should be critically evaluated on their ability to generate a preventive effect on the third country and the impact on the affected domestic sector.
AEGIS Europe	Belgium	for	<ul style="list-style-type: none"> ➤ Welcoming the Commission's proposal for the establishment of an Anti-Coercion Instrument ➤ The scope of Article 2 (1) of the Proposal should be widened so that “measures of economic coercion” cover those that target EU economic operators, in addition to those actions directly aimed at government authorities ➤ It is essential for the Commission to be able to act in a timely and effective manner under the instrument ➤ Welcoming the Commission's choice to include an obligation to consult and inform stakeholders
Confederation of Swedish Enterprise	Sweden	??	<ul style="list-style-type: none"> ➤ It is unclear what level of coercion would constitute ACI ➤ Preferring positive Qualified Majority Voting(QMV)¹⁶⁴, not negative QMV

¹⁶⁴ In negative QMV, it is necessary for a majority of member votes to oppose the measure in order to stop it; otherwise, it will be carried out.

			<ul style="list-style-type: none"> ➤ the measures used by the EU are not themselves informal or in the grey zone but legal and fully transparent. ➤ Opposing measures that disrespect property which in this case means any restrictions on third country IPR in the EU ➤ What remains then that is more acceptable are various policies to increase the costs for firms from countries that coerce us. This means customs duties, fees, or fines, for goods and (when possible) services.
France Industrie	France	for	<ul style="list-style-type: none"> ➤ Welcoming the Commission's proposal for the establishment of an Anti-Coercion Instrument ➤ The scope of the instrument must therefore be broadened to encompass such economic coercion, including extraterritorial measures ➤ Welcoming the Commission's choice to include an obligation to consult and inform stakeholders ➤ Including a real mechanism of compensation or indemnification for the damage suffered by economic operators ➤ Welcoming an appropriately tailored and targeted response on a case-by-case basis as well as the possibility to apply restrictive measures (sanctions) to targeted natural or legal persons involved into the adoption and application of the coercive measures
DIGITALEUROPE	Belgium	for	<ul style="list-style-type: none"> ➤ Welcoming the Commission's proposal for the establishment of an Anti-Coercion Instrument ➤ It cannot be used for protectionist purposes, but only to deter and counteract coercive actions from non-EU countries

			<ul style="list-style-type: none"> ➤ Retaliatory actions must be demonstrated to comply with the WTO rules the EU seeks to uphold ➤ Measures must be time-limited and reversible ➤ Advocating to improve the functioning of the EU Blocking Statute
Cerame-Unie	Belgium	for	<ul style="list-style-type: none"> ➤ Welcoming the Commission's proposal for the establishment of an Anti-Coercion Instrument ➤ It is important to be consulted before the adoption or amendment of anti-coercion response measures, as provided by Article 11 of the Proposal.
Insurance Europe	Belgium	for	<ul style="list-style-type: none"> ➤ Welcoming the Commission's proposal for the establishment of an Anti-Coercion Instrument ➤ It should take a proportionality approach and be as a last resort ➤ It should include a compensation mechanism for companies affected by third countries' coercive measures, and consultation mechanism ➤ The scope should include extra-territorial sanctions should be included in the scope of the regulation
French Business Confederation	France	??	<ul style="list-style-type: none"> ➤ Welcoming the Commission's proposal for the establishment of an Anti-Coercion Instrument ➤ It should be as a last resort when all the options for dialogue and cooperation have failed. ➤ Boycotts, punitive tariffs and import or export restrictions, could be covered by the ACI ➤ It is regrettable that extraterritorial sanctions, as well as export control regimes, extraterritorial criminal or administrative

			<p>investigations, or legislation ensuring access to company data would remain out of scope</p> <ul style="list-style-type: none"> ➤ Being satisfied with a broad scope that encompasses foreign laws including “disguised coercion”, and clear priority given to negotiations with the third country – prior to its use ➤ It would be desirable if the following measures could be included; A compensation mechanism for EU companies affected by the ACI; Explicit articulation with the EU Blocking Regulation (2271/1996); and Including coercion and threats against companies / business sectors within the scope of the instrument
UNIFE	Belgium	??	<ul style="list-style-type: none"> ➤ Welcoming ACI ➤ ACI should be applied as a last resort ➤ The appreciation of whether a measure is deemed to be coercive should not only focus on the intended effect on EU and its Member States policies but also on the expected effect on EU companies and their market position. ➤ Appreciating the possible suspension of applicable international obligations concerning the right to participate in tender procedures in the area of public procurement ➤ The link between ACI and Blocking Statute Regulation should be clarified, mentioning extraterritorial sanctions ➤ Costs should be well measured so that the benefit resulting from the deployment of such countermeasures outweighs the harm resulting from the coercive measures
Anonymous			

Italian Banking Association	Italy		<ul style="list-style-type: none"> ➤ Tale assetto non sembra essere coerente con la necessità di poter disporre di contromisure certe, adeguate e rapide. ➤ di ogni ulteriore “termine” ritenuto rilevante contenuto nel testo della Proposta di Regolamento , ai fini della corretta comprensione di quest’ultimo e della sua conseguente applicazione.
The Bucharest Chamber of Commerce and Industry	Romania	against	<ul style="list-style-type: none"> ➤ This proposal for regulation can generate counter-effects, making room for increased protectionism ➤ European Commissions should envision possibilities for SMEs to be allowed to trade, outside the coercion mechanism and its political consideration,
The Danish Chamber of Commerce	Denmark	??	<ul style="list-style-type: none"> ➤ Supporting the ambition, yet proposed measures are only used as a last resort when all other options have been exhausted ➤ It must be compatible with current WTO legislation ➤ Any overlap with existing legislations should be avoided ➤ ‘Interest of the Union’ should be defined more clearly
Ingo Breuer	Individual		
[March 2021] Fecc	Belgium	??	<ul style="list-style-type: none"> ➤ The source of coercive actions against the EU must be thoroughly evaluated ➤ In the inevitable case that such countermeasures are necessary, the Commission must notify the WTO appellate body and the proper WTO committees ➤ It should however only be considered when

Swedish Confederation of Enterprise	Sweden	against	<p>other avenues to solve such trade disputes has been exhausted</p> <ul style="list-style-type: none"> ➤ It should not be to introduce measures to close markets or even threat to close them ➤ Hoping to refer specifically to the updated enforcement regulation as well as IPI ➤ In general, businesses strongly dislike uncertainty. It would therefore be negative if this instrument gave the EU a blank check to impose any kind of sanction against third countries, that could well be negative for our own firms
AVE	Germany	for	<ul style="list-style-type: none"> ➤ Supporting the intent associated to this initiative and the reason behind the efforts to check for its feasibility ➤ Hoping to take this opportunity to highlight and shift the focus towards collateral damages such measures might have ➤ It further remains key in this context to address the United States's (and with the recent progress China's) perception and implementation of their imposed sanctions and export control regimes to be extraterritorial
Airbus	France	for	<ul style="list-style-type: none"> ➤ Counter coercive policies and practices is essential from the point of view of EU strategic autonomy and level playing field ➤ The European Union must be able to adopt deterring actions and, where appropriate, corrective ones to restore a balance of forces and find a positive and negotiated solution to situations of coercion ➤ With regard to the aerospace and defence sector, particular attention should be paid to the rules for export control rules (ITAR, EAR), which can constitute a very intrusive

United Company RUSAL	Russia	for	<p>means of pressure or coercion</p> <ul style="list-style-type: none"> ➤ Welcoming to deploy an instrument to deter and counteract coercive actions by third countries ➤ The need for the EU to strengthen its defense capability to repel unilateral coercive actions by third countries to prevent possible breaches in supply chains embracing raw materials/goods that are critical and essential for the EU industry
French Aerospace Industries Association (GIFAS)	France	for	<ul style="list-style-type: none"> ➤ Ces mesures peuvent poursuivre des objectifs de politique étrangère ou des intérêts économiques non européens ➤ Se donner les moyens de dissuader et, si nécessaire, de contrer les politiques et pratiques coercitives est indispensable du point de vue de l'autonomie stratégique européenne et de l'exigence d'une concurrence équitable
AFEP	France	for	<ul style="list-style-type: none"> ➤ Welcoming the preparation of such initiative ➤ The need to design an instrument to rapidly react to unilateral and disproportionate trade restrictive measures by third countries outside the framework of WTO or FTA dispute settlement mechanism
Central European Energy Partners	Belgium	agaist	<ul style="list-style-type: none"> ➤ Any consideration for establishing Deterring Instrument should take into account impact on efforts to build international environment based on consensus and to develop relations with third countries that share EU values ➤ Adopting EU countermeasures through either implementing or delegated acts would miss complicated nature of coercive practices of third countries. Without properly established process including a consent of Member States, enacting of trade, investment or other

				policy countermeasures might lead to more harm than gains
				➤ Stakeholder consultation and participation would not be enough to provide the necessary geopolitical perspective required to resolve a situation.
Fondation pour le droit continental	France	for		➤ Welcoming and actively supports the European Commission in its ambition to set up a mechanism to prevent and counter coercive measures taken by third countries
				➤ There is an urgent need to act with one voice at European level, to weigh in the balance of negotiations with non-European powers
InterDigital	US	??		➤ The EU may find it necessary to bring this form of coercive action within the scope of an anti-coercion instrument. If so, the "trigger" should be circumstances in which a non-EU court issues an order which purports to restrict the exercise of IP rights by an EU economic operator in courts where no current action exists between the parties.
				➤ A possible "countermeasure" which could be considered is the scope to confer effective remedies to an EU economic operator against unlicensed goods through a procedure which is not vulnerable to interference by a foreign court, for instance through an administrative procedure such as a customs measure
spiritsEUROPE	Belgium	for		➤ Hoping to underline a rapid and forceful defense of the EU's economic interests is a positive thing provided it does not put at risk – or hurt – the EU's offensive trading interests involuntarily by exposing sectors in which the EU enjoys a strong trade surplus to third country retaliation as a result
				➤ The Commission must not be overly

			prescriptive when defining the criteria for situations in which EU action could be taken
			➤ the Commission should retain sufficient room of maneuver for a comprehensive political assessment of the situation so as to preserve the ability to (re-)act appropriately and proportionately, even in cases where third countries' coercive measures are not acknowledged or postulated as such officially
Government of Japan	Japan	??	➤ Appreciating further clarification on (i) the definition or scope of "coercive action" which the instrument would target, (ii) what kind of measures the EU may take to deter and counter such coercive actions, and (iii) on what conditions such deterring/counter actions may be taken ➤ The need to pay careful attention to the point of WTO consistency of possible counter actions and will continue to closely monitor the development of the proposal
National Board of Trade Sweden	Sweden	??	➤ It is not possible to identify appropriate policy objectives or policy options at this stage ➤ There is a need for an analysis of potential second and third tier effects of intended measures under the proposed legislation
The Danish Chamber of Commerce (Dansk Erhverv)	Denmark	??	➤ Supporting the Commission's ambition of shielding individual Member States and their businesses from arbitrary coercive measures from third countries ➤ A new instrument has to be WTO compliant and that the Commission should avoid any overlap with existing instruments such as the Blocking Statute ➤ There must be clarity as to the potential use of the instrument as uncertainty is detrimental

Verband Maschinen- Anlagenbau e.V.	Deutscher und	Germany	for	to trade
				➤ Being in favour of the EU adopting an EU legal instrument to deter and counteract coercive actions by third countries
				➤ The instrument must be guided by the principle that the best defence is a high deterrence for the coercive action of a third country. A high deterrence is for example achieved by increasing the cost of coercion as well as by reducing the probability of success of the coercion.
Cerame-Unie		Belgium	for	➤ Supporting the establishment of a mechanism to reach against coercive actions by third countries
				➤ It will be crucial to deter other countries from retaliating and to attenuate the negative effects of these coercions with effective and prompt policy measures, able to counteract to the responsible trade partners.
Febev Association)	(Belgian Meat	Belgium	??	➤ China has employed negotiations as leverage for ones on another topics
				➤ Remarking some countries voluntarily delay to respond to our demand

Reference

- Albert O. Hirschman, “National Power and the Structure of Foreign Trade,” *University of California*

Press, 1980.

- Ali Harb, “US has little leverage against Russia-North Korea cooperation, experts say,” *Aljazeera*, September 13, 2023, <https://www.aljazeera.com/news/2023/9/13/us-has-little-leverage-against-russia-north-korea-cooperation-experts-say>.
- Andrew Higgins, “In Philippines, banana growers feel effect of South China Sea dispute,” *the Washington Post*, June 10, 2012, https://www.washingtonpost.com/world/asia_pacific/in-philippines-banana-growers-feel-effect-of-south-china-sea-dispute/2012/06/10/gJQA47WVTV_story.html.
- Avery Goldstein, “China’s Grand Strategy under Xi Jinping,” *International Security*, Vol. 45, No. 1, 2020, pp. 164–201
- “Beef 2020 Export Highlights,” U.S Department of Agriculture, access granted on August 22, 2023, <https://www.fas.usda.gov/beef-2020-export-highlights>.
- Bharat Kapoor, Mike Hales, Drew DeLong, and Stefan Antonsson, “How much direct revenue exposure do semiconductor companies have to US export controls and restrictions against China?, ” Kearney, November 18, 2022, <https://www.kearney.com/industry/technology/article/-/insights/how-much-direct-revenue-exposure-do-semiconductor-companies-have-to-us-export-controls-and-restrictions-against-china>.
- Biao Zhang, “Rethinking China’s ‘economic coercion’: The case of the UK leaders’ meeting with the Dalai Lama in 2012,” *The British Journal of Politics and International Relations*, 2022, pp. 1–17.
- Bill Birtles, “China increasingly expected to drop ban on Australian coal as nation's economic woes deepen,” *ABC News*, July 16, 2022, <https://www.abc.net.au/news/2022-07-15/china-increasingly-expected-to-drop-ban-on-australian-coal/101242670>.
- Bonnie S. Glasser, “Time for Collective Pushback against China’s Economic Coercion,” *Centre for Strategic of International Studies*, January 13, 2021
- Bryan Frederick and Howard J. Shatz, “Countering Chinese Coercion,” *Rand Corporation*, December 2022,
- Bryce Barros and Krystyna Sikora, “China’s sanctions regime and Lithuania: Policy responses for European institutions,” Hinrich Foundation, August, 2022, pp. 1-29
- (CFSP) 2022/265
- “China halts Lithuania beef, dairy and beer imports amid Taiwan row,” *BBC News*, February 11, 2022, <https://www.bbc.com/news/business-60343316>.
- “China remains the world’s largest meat importer despite recent declines,” US department of Agriculture, July 27, 2023, <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=106996>.
- “China tells U.S. it will defend interests after Trump tariffs,” *CTV News*, March 24, 2018, <https://www.ctvnews.ca/mobile/business/china-tells-u-s-it-will-defend-interests-after-trump-tariffs-1.3856942?cache=yesclipId10406200text/html;charset=utf-80404/7.569977>.
- Daisuke Hyodo, “Chinese Companies' Expansion of Lithium Resources in South America,” Japan Organization for Metals and Energy Security, August 8, 2023, <https://mrjc.jogmec.go.jp/reports/current/20230808/178500/>. (in Japanese)
- Daniel W. Drezner, “The Hidden Hand of Economic Coercion,” *International Organization*, Vol.

57, No. 3, (2003), pp. 643-659

- Daniel Drezner, “The Sanctions Paradox -Economic Statecraft and International Relations,” *Cambridge University Press*, 1999
- Darren J. Lim and Victor A. Ferguson, “Informal economic sanctions: the political economy of Chinese coercion during the THAAD dispute,” *Review of International Political Economy*, vol. 29, No. 5 (2022), pp. 1525-1548
- David A. Baldwin, “Economic Statecraft,” *Princeton University Press*, 2020
- David Hayes, “Norway increases salmon exports to China,” *World Fishing*, February 14, 2013, <https://www.worldfishing.net/norway-increases-salmon-exports-to-china/106874.article>.
- Dean Lacy and Emerson M. S. Niou, “A Theory of Economic Sanctions and Issue Linkage: The Roles of Preferences, Information, and Threats,” *The Journal of Politics*, Vol. 66, No. 1, 2004, pp.25-42
- the Department of Treasury of Government of Australia, “Building Resilience and the Return of Strategic Competition, Melbourne,” September 6, 2021, <https://ministers.treasury.gov.au/ministers/josh-frydenberg-2018/speeches/building-resilience-andreturn-strategic-competition>.
- Don Lee, “Commerce Department urges Trump to impose tariffs or quotas on steel and aluminum imports,” *Los Angeles Times*, February 18, 2018, <https://www.latimes.com/business/la-fi-steel-tariffs-20180216-story.html>.
- “The Dutch Government announced an additional export control on semiconductor equipment,” *JETRO*, July 10, 2023, <https://www.jetro.go.jp/biznews/2023/07/5924b578e1080a11.html>. (in Japanese)
- Echo Huang, “China inflicted a world of pain on South Korea in 2017,” *Quartz*, December 21, 2017, <https://qz.com/1149663/china-south-korea-relations-in-2017-thaad-backlash-and-the-effect-on-tourism>.
- Emily Holden, “U.S. setting stage for solar trade war with China,” *Politico*, December 15, 2017, <https://www.politico.com/story/2017/12/15/trump-solar-power-china-trade-barriers-230854>.
- “EU adopts fifth round of sanctions against Russia over its military aggression against Ukraine,” European Council, April 8, 2022, access granted on November 4, 2023, <https://www.consilium.europa.eu/en/press/press-releases/2022/04/08/eu-adopts-fifth-round-of-sanctions-against-russia-over-its-military-aggression-against-ukraine/>.
- “EU adopts its latest package of sanctions against Russia over the illegal annexation of Ukraine's Donetsk, Luhansk, Zaporizhzhia and Kherson regions,” Council of the European Union, October 6, 2022, <https://www.consilium.europa.eu/en/press/press-releases/2022/10/06/eu-adopts-its-latest-package-of-sanctions-against-russia-over-the-illegal-annexation-of-ukraine-s-donetsk-luhansk-zaporizhzhia-and-kherson-regions/>.
- “EU imposes further sanctions over serious violations of human rights around the world,” Council of the EU, March 22, 2021, <https://www.consilium.europa.eu/en/press/press-releases/2021/03/22/eu-imposes-further-sanctions-over-serious-violations-of-human-rights-around-the-world/>.
- European Commission, 2021/0406 (COD), December 8, 2021
- European Commission, com (2021) 775 final, December 8, 2021
- European Commission, com(2019) 562 final, November 4, 2019
- “Feedback from: AFEP,” March 17, 2021, <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12803-Trade-mechanism-to-deter-counteract-coercive-action-by-non-EU->

[countries/F2001976_en.](#)

“Feedback from: BMW Group,” European Commission, March 31, 2022, https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12803-Trade-mechanism-to-deter-counteract-coercive-action-by-non-EU-countries/F2959965_en.

- Feng Zhaokui, “What Are China’s Core Interests?” *China US Focus*, October 21, 2014, <https://www.chinausfocus.com/foreign-policy/what-are-chinas-core-interests-2>.
- Fergus Hunter, Daria Impiombato, Yvonne Lau and Adam Triggs, Albert Zhang and Urmika Deb, “Countering China’s coercive diplomacy Prioritising economic security, sovereignty and the rules-based order,” *Australian Strategic Policy Institute*, Policy Brief Report, No. 68, February 2023
- Fiona S. Cunningham, M. Taylor Fravel, “Assuring Assured Retaliation China’s Nuclear Posture and U.S.-China Strategic Stability,” *International Security*, Vol. 40, No. 2 (Fall 2015), pp. 7–50
- “Foreign Ministry Spokesperson Wang Wenbin’s Remarks on Joint Letter by Presidents of Two EU Institutions on Taiwan-Related Issue Concerning Lithuania in Response to Letter by Some European Legislators,” Ministry of Foreign Affairs of Republic of China, October 30, 2021, access granted on November 4, 2023, https://www.fmprc.gov.cn/eng/xwfw_665399/s2510_665401/2535_665405/202110/t20211030_10404355.html.
- “Fact sheets for countries, economies and regions, China,” Department of Foreign Affairs and Trade, Australian Government, access granted on October 18, 2023, <https://www.dfat.gov.au/sites/default/files/chin-cef.pdf>.
- “Foreign Ministry Spokesperson Announces Sanctions on Relevant EU Entities and Personnel,” Ministry of Foreign Affairs of Republic of China, March 22, 2021, access granted on November 4, 2023, https://www.fmprc.gov.cn/eng/xwfw_665399/s2510_665401/2535_665405/202103/t20210322_9170814.html.
- Gauresh Mahadik, “CCTV Acquires Media Rights of Premier League for Three Seasons,” *Sportsmint*, August 2, 2022, <https://sportsmintmedia.com/cctv-acquires-media-rights-of-premier-league-for-three-seasons/>.
- “G7 Hiroshima Leaders’ Communiqué,” G7 Hiroshima 2023, May 20, 2023, https://www.g7hiroshima.go.jp/documents/pdf/Leaders_Communique_01_en.pdf.
- “G7 Trade Ministers’ Statement Osaka-Sakai, 29 October 2023,” October 29, 2023, <https://www.mofa.go.jp/files/100573173.pdf>.
- Heigo Sato, “theoretical approach on economic statecraft,” *International Relations*, vol. 205, February 2022, pp. 14-28 (in Japanese)
- Helene Cooper, Thomas Gibbons-Neff, Eric Schmitt and Julian E. Barnes, “Troop Deaths and Injuries in Ukraine War Near 500,000, U.S. Officials Say,” *the New York Times*, August 18, 2023, <https://www.nytimes.com/2023/08/18/us/politics/ukraine-russia-war-casualties.html>.
- “Infographic - Impact of sanctions on the Russian economy,” European Council, May 4, 2023, access granted on October 7, 2023, <https://www.consilium.europa.eu/en/infographics/impact-sanctions-russian-economy/>.
- Ivar Kolstad, “Too big to fault? Effects of the 2010 Nobel Peace Prize on Norwegian exports to China and foreign policy,” *International Political Science Review*, Volume 41, Issue 2, March 2020, pp. 207-223
- Jacob Yaniero, “Suniva, SolarWorld Tariff Case turns to remedies,” *Norton Rose Fullbright*, October 9, 2018, <https://www.projectfinance.law/blog/2017/october/suniva-solarworld-tariff-case-turns-to-remedies/>.
- Jonathan Barrett, Gus Trompiz, “Barley trade routes redrawn as China tariff hits Australian farmers,” *Reuters*, November 17, 2020, <https://www.reuters.com/article/us-australia-china-barley->

[idUSKBN27X02T](#).

- Jung Min-hee, “Lotte Faces 500 Billion Won Losses in China over THAAD Retaliation,” *BusinessKorea* May 8, 2017, <https://www.businesskorea.co.kr/news/articleView.html?idxno=18007>.
- Kazuko Kojima, “The Magnetic Field of “Marketization” Policy Formation under the Xi Jinping Administration; Separation of industry associations from government agencies and a new type of pro-Qing (close but clean) political-commercial relationship,” the Japan Forum on International Relations, April 30, 2021, https://www.jfir.or.jp/studygroup_article/5871/. (in Japanese)
- Kazuto Suzuki, “Examining the Concept of Economic Statecraft,” *International Relations*, vol. 205, February 2022, pp. 1-13 (in Japanese)
- Ken Moriyasu, “China to develop Guinea in earnest, aiming to procure iron ore and leave Australia,” *Nikkei*, August 23, 2023, <https://www.nikkei.com/article/DGXZQOCB171JA0X10C23A8000000/>.
- Ketian Vivian Zhang, “Chinese non-military coercion -Tactics and rationale,” *the Brookings Institution*, January 22, 2019, <https://www.brookings.edu/articles/chinese--non--military--coercion--tactics--and--rationale/>.
- Kim Jaewon, “South Korea plans to invest \$450bn to become chip 'powerhouse',” *Nikkei Asia*, May 13, 2023, <https://asia.nikkei.com/Business/Tech/Semiconductors/South-Korea-plans-to-invest-450bn-to-become-chip-powerhouse>.
- Laura Noonan and Alan Smith, “Penalties for failing to stop financial crime increase 50%; ? Banks and others paid \$5bn in 2022 ? Fears fines neither punish nor deter,” *Financial Times*, January 23, 2023
- Leonor Hubaut, “Bruxelles muscle son arsenal de défense économique,” *le Figaro*, December 8, 2021 (in French)
- “Liu Xiaobo,” the Nobel Prize, access granted on October 23, 2023, <https://www.nobelprize.org/prizes/peace/2010/xiaobo/facts/>.
- Louis Harkell, “China’s seafood imports surge to \$19bn in 2022 despite COVID lockdowns,” *China Fisheries & Seafood Expo*, April 12, 2023, <https://chinaseafoodexpo.com/chinas-seafood-imports-surge-to-19bn-in-2022-despite-covid-lockdowns/>.
- Mark Lewis, “Norway's salmon rot as China takes revenge for dissident's Nobel Prize,” *Independent*, October 6, 2011, <https://www.independent.co.uk/news/world/europe/norway-s-salmon-rot-as-china-takes-revenge-for-dissident-s-nobel-prize-2366167.html>.
- “Material flow 2018,” Japan Organization for Metals and Energy Security, March 2019, p.365, https://mrjc.jogmec.go.jp/wp-content/uploads/2019/03/material_flow2018_A1.pdf. (in Japanese)
- Mathieu Duchâtel, “Effective Deterrence? The Coming European Anti-Coercion Instrument,” *Institut Montaigne*, December 2, 2022, <https://www.institutmontaigne.org/en/expressions/effective-deterrence-coming-european-anti-coercion-instrument>.
- Matthew Reynolds and Matthew P. Goodman, “Deny, Defect, Deter, countering China’s Economic Coercion,” *Centre for Strategic of International Studies*, March, 2023
- Michael Smith, “Supply disruption to China gives hope to Australian beef exporters,” *Financial Review*, October 20, 2021, <https://www.afr.com/world/asia/supply-disruption-to-china-gives-hope-to-australian-beef-exporters-20211020-p591kg>.
- Michito Tsuruoka, “Is Collective Defense in the Economic Domain Possible? Lessons from the Australia-China Conflict,” the Sasagawa Peace Foundation, August 4, 2021, https://www.spf.org/iina/en/articles/tsuruoka_01.html.

- Mitch Phillips, “Clubs unlikely to bite the Chinese hand that feeds,” *Reuters*, December 17, 2019, <https://www.reuters.com/article/uk-soccer-arsenal-china-idUKKBN1YK26H>.
- Miroslava Scholten, “Mind the trend! Enforcement of EU law has been moving to ‘Brussels’,” *Journal of European Public Policy*, 2017, Vol. 24, No. 9, p. 1350
- “National Security Strategy of Japan,” *the Cabinet Secretariat of Japan*, December, 2022.
- NATO, “Strategic Concept,” June 29, 2022
- Nerijus Adomaitis, “Q+A What is known about the Nord Stream gas pipeline explosions,” *Reuters*, September 27, 2023, <https://www.reuters.com/world/europe/qa-what-is-known-about-nord-stream-gas-pipeline-explosions-2023-09-26/>.
- “Nishimura Asahi,” *Business & Law*, January 11, 2023, access granted on November 8, 2023, <https://businessandlaw.jp/articles/lawyersguide2023-file11/>.
- “Norway’s salmon exports to China up 67 pct in 1H by volume,” *Xinhua*, July 5, 2023, <https://english.news.cn/20230705/aaa2ed7f18d64a56b227071749b06392/c.html>.
- “OFAC Settles with Microsoft Corporation for \$2,980,265.86 Related to Apparent Violations of Multiple OFAC Sanctions Programs,” US Department of Treasury, April 6, 2023, <https://ofac.treasury.gov/media/931591/download?inline>.
- “Order of the Vice-president of the Court,” Court of Justice of the European Union, April 23, 2023, <https://curia.europa.eu/juris/document/document.jsf?text=&docid=273000&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=50045>.
- Patrick M. Morgan, “Deterrence Now,” *Cambridge University Press*, 2003
- Peter Hoskins, “China drops Australia barley tariffs after three years,” *BBC News*, August 4, 2023, <https://www.bbc.com/news/business-66402220>.
- “Political agreement on new Anti-Coercion Instrument to better defend EU interests on global stage,” European Commission, June 6, 2023, access granted on November 4, 2023, https://ec.europa.eu/commission/presscorner/detail/en/IP_23_3046.
- “President Donald J. Trump is Addressing Unfair Trade Practices That Threaten to Harm Our National Security,” White House, March 8, 2018, <https://trumpwhitehouse.archives.gov/briefings-statements/president-donald-j-trump-addressing-unfair-trade-practices-threaten-harm-national-security/>.
- “Relevant person in charge of the Customs Tariff Commission Office of the State Council answered reporters’ questions on reducing import tariffs on complete automobiles and parts,” Ministry of Finance of Republic of China, May 22, 2018, access granted on November 4, 2023, https://www.mof.gov.cn/zhengwuxinxi/zhengcejiedu/201805/t20180522_2904010.htm. (in Chinese)
- “Remarks by President Trump at Signing of Section 201 Actions,” White House, January 23, 2018, <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-signing-section-201-actions/>.
- “Remarks by President Trump at Signing of a Presidential Memorandum Targeting China’s Economic Aggression,” White House, March 22, 2018, access granted on November 4, 2023, <https://trumpwhitehouse.archives.gov/briefings-statements/remarks-president-trump-signing-presidential-memorandum-targeting-chinas-economic-aggression/>.
- Robert Keohane and Joseph Nye, “Power and interdependence: World politics in transition,” *Little, Brown & Company*, 1977
- Robert A. Pape, “Why Economic Sanctions Do Not Work,” *International Security*, Vol. 22, No. 2, 1997, pp. 90-136

- “Russia’s military aggression against Ukraine: Council imposes sanctions on 26 persons and one entity,” European Council, February 28, 2022, access granted on November 4, 2023, <https://www.consilium.europa.eu/en/press/press-releases/2022/02/28/russia-s-military-aggression-against-ukraine-council-imposes-sanctions-on-26-persons-and-one-entity/>.
- “Russia’s military aggression against Ukraine: fourth EU package of sectoral and individual measures,” Council of the European Union, March 15, 2022, <https://www.consilium.europa.eu/en/press/press-releases/2022/03/15/russia-s-military-aggression-against-ukraine-fourth-eu-package-of-sectoral-and-individual-measures/>.
- “Russian salmon exports up 64%,” *IntraFish*, February 1, 2012, <https://www.intrafish.com/news/russian-salmon-exports-up-64-/1-1-490856>.
- “Russia’s war of aggression against Ukraine: EU adopts 9th package of economic and individual sanctions,” Council of the European Union, December 16, 2022, <https://www.consilium.europa.eu/en/press/press-releases/2022/12/16/russia-s-war-of-aggression-against-ukraine-eu-adopts-9th-package-of-economic-and-individual-sanctions/>.
- Saloni Sardana, “What exclusion from the SWIFT banking system means for Russia,” *Money Week*, February 28, 2023, <https://moneyweek.com/economy/global-economy/604512/what-exclusion-from-the-swift-banking-system-means-for-russia>.
- Sharon LaFraniere, “Chinese Cancel Meeting With Norwegian Minister,” *the New York Times*, October 11, 2010, <https://www.nytimes.com/2010/10/12/world/asia/12china.html>.
- Shintaro Hosokawa, “SK Hynix to Develop Cutting-Edge 321-Layer NAND Memory,” *Nikkei*, August 9, 2023, <https://www.nikkei.com/article/DGXZQOGM091WV0Z00C23A8000000/#:~:text=%E3%80%90%E3%82%BD%E3%82%A6%E3%83%AB%3D%E7%B4%B0%E5%B7%9D%E5%B9%B8%E5%A4%AA%E9%83%8E%E3%80%91%E9%9F%93%E5%9B%BD,%E5%B9%B4%E4%B8%8A%E5%8D%8A%E6%9C%9F%E3%81%AB%E9%87%8F%E7%94%A3%E3%81%99%E3%82%8B%E3%80%82>. (in Japanese)
- Shintaro Hosokawa, Nami Matsuura “Samsung’s “30 Trillion Yen” Seductive Force: Major Semiconductor Equipment Companies Establish South Korean Facilities One after Another, Aiming to Improve Development Efficiency,” *Nikkei*, May 24, 2023, <https://www.nikkei.com/article/DGKKZO71268040T20C23A5FFJ000/>. (in Japanese)
- Shintaro Hosokawa, “Samsung Semiconductor: Recovery Far Away, 400 Billion Yen Loss in July-September, Sluggish Demand / Time to Expand Outsourcing Memory,” *Nikkei*, October 12, 2023, <https://www.nikkei.com/nkd/company/us/WDC/news/?DisplayType=1&ng=DGKKZO7518307011102023FFJ000>. (in Japanese)
- Shintaro Hosokawa, “Semiconductor Technology Leaked out of China South Korean Prosecutors Indict Former Samsung Managing Director and Others, Obtaining Plans to Build a Plant by Obtaining Drawings and Pimping Out 200 Engineers,” *Nikkei*, June 14, 2023, <https://www.nikkei.com/article/DGKKZO71859520T10C23A6FFJ000/#:~:text=%E3%80%90%E3%82%BD%E3%82%A6%E3%83%AB%3D%E7%B4%B0%E5%B7%9D%E5%B9%B8%E5%A4%AA%E9%83%8E%E3%80%91%E9%9F%93%E5%9B%BD,%E3%82%92%E6%8E%A1%E7%94%A8%E3%81%97%E3%81%A6%E3%81%84%E3%81%9F%E3%80%82>. (in Japanese)
- Sibylle Bauer and Mark Bromley, “Detecting, Investigating and Prosecuting Export Control Violations,” *Stockholm International Peace Research Institute*, 2019
- Solenn Paulic, “Washington veut réduire la dépendance des dépendances des européens au nucléaire russe,” *le Figaro*, April 5, 2023 (in French)
- “Spokesperson of the Ministry of Foreign Affairs made a statement on China’s decision to recall its ambassador to Lithuania,” Ministry of Foreign Affairs of Republic of China, August 10, 2021, access granted on November 4, 2023,

https://www.mfa.gov.cn/web/fyrbt_673021/dhdw_673027/202108/t20210810_9171362.shtml. (in Chinese)

- “The spokesperson of the Ministry of Foreign Affairs announced that China has imposed sanctions on relevant EU institutions and personnel,” Ministry of Foreign Affairs of Republic of China, March 22, 2021, access granted on November 4,

2023, https://www.mfa.gov.cn/web/fyrbt_673021/dhdw_673027/202103/t20210322_9171336.shtml. (in Chinese)

- “Statement from President Donald J. Trump on Additional Proposed Section 301 Remedies,” White House, April 5, 2018, access granted on November 4, 2023,

<https://trumpwhitehouse.archives.gov/briefings-statements/statement-president-donald-j-trump-additional-proposed-section-301-remedies/>.

- “Strategy on China,” the Government of the Federal Republic of Germany, July 13, 2023,

<https://www.auswaertiges-amt.de/blob/2608580/49d50fecc479304c3da2e2079c55e106/china-strategie-en-data.pdf>.

- “SUMMARY OF RESULTS OF THE OPEN PUBLIC CONSULTATION on the review of the Blocking Statute,” European Commission, December 2021,

https://finance.ec.europa.eu/system/files/2021-12/2021-blocking-statute-review-summary-of-responses_en.pdf.

- “Summary of Economic Security Promotion Act,” *the Cabinet Secretariat of Japan*, access granted on October 10, 2023, https://www.cao.go.jp/keizai_anzen_hosho/doc/gaiyo.pdf. (in Japanese)

- Tom Daly and Emily Chow, “China’s imports of Australian copper ore crashed to zero in December,” *Reuters*, January 20, 2021, <https://www.reuters.com/world/china/chinas-imports-australian-copper-ore-crashed-zero-december-2021-01-20/>.

- “US - China trade talks end with key differences still unresolved,” *Right Vision Media*, May 8 2018, access granted on September 11, 2023 link.gale.com/apps/doc/A537759379/ITOF?u=unitokyo&sid=bookmark-ITOF&xid=a4b18086.

- “Vice Foreign Minister Qin Gang Holds Political Consultation with Vice Foreign Minister Neris Germanas of Lithuania,” Ministry of Foreign Affairs of Republic of China, January 23, 2020, access granted on November 4, 2023,

https://www.fmprc.gov.cn/eng/gjhdcq_665435/3265_665445/3195_664630/3197_664634/202002/t20200204_577574.html

- “Vice Foreign Minister Qin Gang Meets with Outgoing Lithuanian Ambassador to China Ina Marciulionyte,” Ministry of Foreign Affairs of Republic of China, July 24, 2020, access granted on November 4, 2023,

https://www.fmprc.gov.cn/eng/gjhdcq_665435/3265_665445/3195_664630/3197_664634/202007/t20200728_577576.html.

- Victor Cha, “How to Stop Chinese Coercion: The Case for Collective Resilience,” *Foreign Affairs*, Vol. 102 Issue 1(Jan/Feb2023), pp. 89-101

- Yue Hou, “the private sector in public office,” *Cambridge University Press*, 2019

- Zack Cooper, “Between Beijing and a Hard Place: Responding to China’s Economic Coercion,” German Marshall Fund, December 7, 2021, <https://securingdemocracy.gmfus.org/zack-cooper-testifies-before-the-congressional-executive-commission-on-china-on-chinas-economic-coercion/>.