

Carrots or Sticks? Positive Inducements and Sanctions in International Relations

by

So Jin Lee

Department of Political Science  
Duke University

Date: \_\_\_\_\_

Approved:

\_\_\_\_\_  
Peter Feaver, Advisor

\_\_\_\_\_  
David Siegel, Co-Advisor

\_\_\_\_\_  
Kyle Beardsley

\_\_\_\_\_  
Christopher Johnston

Dissertation submitted in partial fulfillment of  
the requirements for the degree of Doctor  
of Philosophy in the Department of  
Political Science in the Graduate School  
of Duke University

2021

ABSTRACT

Carrots or Sticks? Positive Inducements and Sanctions in International Relations

by

So Jin Lee

Department of Political Science  
Duke University

Date: \_\_\_\_\_

Approved:

\_\_\_\_\_  
Peter Feaver, Advisor

\_\_\_\_\_  
David Siegel, Co-Advisor

\_\_\_\_\_  
Kyle Beardsley

\_\_\_\_\_  
Christopher Johnston

An abstract of a dissertation submitted in partial  
fulfillment of the requirements for the degree  
of Doctor of Philosophy in the Department of  
Political Science in the Graduate School of  
Duke University

2021

Copyright by  
So Jin Lee  
2021

## **Abstract**

What is the utility and relative efficacy of positive inducements and sanctions in international politics? Are inducements and sanctions actually different or just the two sides of the same coin? How have inducements and sanctions been used and how effective have they been? My dissertation examines the effect of carrot and stick-like foreign policies in international relations. Dominant works on risk-taking and decision-making—like loss aversion—have shown that people are more sensitive to potential losses than gains, which would suggest that sanctions should be utilized more in order to achieve preferred outcomes. I find, however, that inducement policies that require concessions from the target state can be framed to gain the target state’s public support and allow target state leaders to “save face.” In contrast, I find that sanctions provoke nationalism, creating a rally around the flag effect, resulting in negative consequences for the sender state. Using a presence-absence framework, utilizing experimental methods to study the micro-foundations of inducement and sanction perceptions, as well as a case study of North Korea based on field work in South Korea consisting of archival work and interviews, my dissertation aims to bridge the policy-academy gap by translating a perennial policy-level problem of “carrots vs. sticks” to an academic question assessing the utility and relative efficacy of positive inducements versus sanctions.

## **Dedication**

*For my parents, Ki Seog Lee and Jae Sil Chung, my heroes.*

# Contents

Abstract .....	iv
List of Tables.....	xi
List of Figures.....	xiii
1. Introduction.....	1
1.1 Inducements and Sanctions as Economic Statecraft .....	6
1.1.1 Inducements in Security Studies.....	8
1.1.1.1 Inducements Can Work.....	8
1.1.1.2 Inducements Can Backfire.....	10
1.1.1.3 Foreign Aid as Inducements .....	11
1.1.2 Sanctions in Security Studies.....	12
1.1.2.1 Sanctions Don't Work .....	12
1.1.2.2 Sanctions Can Work .....	14
1.2 Conclusion.....	15
2. Conceptual Framework of Inducements and Sanctions .....	17
2.1 Law of Effect and Operant Conditioning Model.....	18
2.2 Conceptual Framework of Carrots and Sticks in IR.....	22
2.2.1 Expectations .....	25
2.2.2 Public Opinion and Foreign Policy .....	26
3. Experimental Microfoundations of Positive Inducements and Sanctions I: Evidence from China, India, and South Korea .....	28
3.1 Research Design .....	28

3.1.1 The Case for Three Countries and Two Types of Offense .....	29
3.1.2 Vignettes.....	32
3.1.2.1 Security Vignette: Convention on Cluster Munitions (CCM).....	32
3.1.2.2 Non-Security Vignette: Human Rights (HR).....	33
3.1.2.3 Control and Treatments Conditions .....	34
3.1.3 Specific Expectations .....	36
3.1.4 Model Specifications.....	38
3.2 Results.....	40
3.3 Conclusion.....	51
4. Experimental Microfoundations of Positive Inducements and Sanctions II: Further Evidence from India .....	53
4.1 Research Design .....	54
4.1.1 The Experiment .....	58
4.1.1.1 Carrot.....	61
4.1.1.2 Stick.....	61
4.1.1.3 Lift Stick .....	61
4.1.1.4 Lift Carrot .....	62
4.2 Expectations .....	64
4.2.1 Marble 1 = 100 & Marble 3 = 200 .....	64
4.2.2 Marble 2 = 150.....	65
4.2.3 $0 < \text{Marble 4} < 300$ .....	66
4.3 Results.....	68

4.3.1 Marble 1 = 100 & Marble 3 = 200 .....	69
4.3.2 Marble 2 = 150 .....	70
4.3.3 $0 < \text{Marble 4} < 300$ .....	72
4.3.4 McNemar's Tests ( $M = 150$ ) .....	72
4.4 Conclusion.....	74
5. Inducements and Sanctions in Practice: A Case Study of North Korea. ....	75
5.1 The Case for North Korea .....	77
5.1.1 Variation in Carrots and Sticks .....	77
5.1.2 Variation in Sender States and Strategies .....	78
5.1.3 Nobel Peace Prize for Inducement-Policy .....	79
5.2 Pre-Sunshine Policy and the 1994 Agreed Framework .....	80
5.3 Sunshine Policy Years (1998-2008).....	82
5.4 Six Party Talks (2003-2009) .....	86
5.5 Post-SPT Years (2009-).....	89
5.6 South Korea's Carrots: Success or Failure? .....	90
5.6.1 Reunification Strategies and Preferences.....	91
5.7 Implications.....	92
6. Conclusion .....	94
6.1 Going Forward and Future Research.....	96
6.1.1 Presence vs. Absence of Positive and Negative Outcomes.....	96
6.1.2 Other Types of Carrots and Sticks.....	96
6.1.3 The Details.....	97



6.1.4 Sender State Perspective .....	98
6.1.5 Ethics and Negative Consequences of Inducements .....	99
6.1.6 Nuclear Weapons Proliferation and Inducements Data .....	99
Appendix A. [Chapter 3] Survey Vignette and Main Dependent Variable (China) .....	101
A.1 Security Condition .....	101
A.1.1 Vignette .....	101
A.1.2 Main Questions .....	102
A.2 Human Rights Condition .....	102
A.2.1 Vignette .....	102
A.2.2 Main Questions .....	103
Appendix B. [Chapter 3] Survey Vignette and Main Dependent Variable (India) .....	104
B.1 Security Condition .....	104
B.1.1 Vignette .....	104
B.1.2 Main Questions .....	105
B.2 Human Rights Condition .....	105
B.2.1 Vignette .....	105
B.2.2 Main Questions .....	106
Appendix C. [Chapter 3] Survey Vignette and Main Dependent Variable (South Korea) .....	107
C.1 Security Condition .....	107
C.1.1 Vignette .....	107
C.1.2 Main Questions .....	107

C.2 Human Rights Condition.....	108
C.2.1 Vignette.....	108
C.2.2 Main Questions.....	108
Appendix D. [Chapter 3] Results .....	109
References .....	121
Biography.....	138

## List of Tables

Table 1: Presence and Absence of Outcomes Framework .....	22
Table 3: Summary of Expectations .....	38
Table 1: Summary of Expectations and Results (China, India, Korea) .....	41
Table 2: Ordered Logit Model (4 Treatments) .....	42
Table 3: U.S. Favorability Measure (Collapsed) .....	43
Table 4: Carrot v. Stick Comparison Models .....	45
Table 5: Expectations for M1 and M3.....	65
Table 6: Expectations for M2 .....	66
Table 7: Crosstab of Responses (Carrot).....	68
Table 8: Crosstab of Responses (Stick).....	68
Table 9: Crosstab of Responses (Lift Stick).....	68
Table 10: Crosstab of Responses (Lift Carrot).....	68
Table 11: Summary of Expectations and Results (M1, M3) .....	69
Table 12: Number Correct (Give Up/Keep) .....	70
Table 13: Number Correct (Political Knowledge).....	70
Table 14: Crosstab of Responses (M = 150).....	71
Table 15: Crosstab of Responses (100 < M < 300).....	72
Table 16: McNemar Carrot vs. Stick ( $p < .01$ ).....	72
Table 17: McNemar Lift Carrot vs. Lift Stick ( $p > .1$ ) .....	73
Table 21: Key Conditions of the Agreed Framework.....	81

Table 22: China CCM Results (4 Treatments).....	109
Table 23: China HR Results (4 Treatments) .....	110
Table 24: China CCM & HR (2 Treatments).....	111
Table 25: China CCM & HR (4 Treatments).....	112
Table 26: India CCM Results (4 Treatments) .....	113
Table 27: India HR Results (4 Treatments).....	114
Table 28: India CCM & HR (2 Treatments).....	115
Table 29: India CCM & HR (4 Treatments) .....	116
Table 30: Korea CCM Results (4 Treatments).....	117
Table 31: Korea HR Results (4 Treatments) .....	118
Table 32: Korea CCM & HR (2 Treatments).....	119
Table 33: Korea CCM & HR (4 Treatments).....	120

## List of Figures

Figure 1: Security Vignette: Convention on Cluster Munitions (CCM).....	32
Figure 2: Non-Security Vignette: Human Rights (HR) .....	33
Figure 3: *Control and Treatment Conditions Wording .....	36
Figure 4: Select Open-Ended Question Responses (CCM) .....	48
Figure 5: Select Open-Ended Question Responses (HR).....	49
Figure 6: Preamble and Questions (Carrot) .....	62
Figure 7: Preamble and Questions (Stick) .....	63
Figure 8: Preamble and Questions (Lift Stick) .....	63
Figure 9: Preamble and Questions (Lift Carrot) .....	64
Figure 10: China-DPRK Trade vs. Inter-Korean Trade (1993-2011) .....	79

# 1. Introduction

On February 1, 2021, the Myanmar military carried out a coup d'état, detaining democratically elected Aung San Suu Kyi and other leaders from the National League for Democracy (NLD) party. Pledging to “stand up for democracy,” U.S. President Joe Biden immediately threatened to impose sanctions on Myanmar, through actions such as denying export and reexport licenses to the Myanmar Ministry of Defense, Ministry of Home Affairs (Lewis, Pamuk, and Psaledakis 2021). The Biden administration was not alone in trying to use economic instruments (sanctions) to achieve foreign policy ends (restoring democracy in Myanmar). Quincy Wright (1955) notes that “politics may be an instrument of economics and economics may be an instrument of politics,” when groups try to influence one another by “offering economic rewards or withholding economic advantages” ((Wright 1955, p.239). Indeed, we can observe various forms of economic statecraft —economics as an instrument of politics (Baldwin 1985)— spanning across time, region, and actors. For example, the International Monetary Fund’s (IMF) \$5.5 billion 2019 aid package for Ukraine was conditional on Ukraine meeting the IMF imposed anti-corruption benchmarks (Kramer 2020). Using a different type of economic reward, U.S. President Barack Obama signed an executive order lifting U.S. sanctions on Iran in January 2016, after confirming Iran’s compliance in the nuclear deal agreed upon the previous year. Conversely, as an economic punishment, U.S. President Donald Trump threatened to cut off existing aid to Honduras if the country did not stop the

caravan of more than 1,500 Honduran migrants headed for the United States in October 2018. In all these instances, policymakers have resorted to economic carrots and sticks to either positively induce or coerce other states to change their behaviors to better match the policymakers' preferences. But how are policymakers choosing which type of economic tool to use? How *should* they be making these decisions?

At the individual-level in other fields, the study of carrots vs. sticks have long been studied and pursued (e.g. parenting, workplace efficiency).<sup>1</sup> However, there lacks a systematic study of carrots and sticks at both the individual and state-levels in international relations. To address this gap, using an interdisciplinary, mixed-methods approach, my dissertation aims to answer the following questions: What is the utility and relative efficacy of positive inducements and sanctions in international politics? Are inducements and sanctions actually different or just the two sides of the same coin? How have inducements and sanctions been used and how effective have they been? For the purpose of this dissertation, I operationalize foreign aid as positive inducements or carrots and economic sanctions as sticks. While scholars in security studies have

---

<sup>1</sup> While the fields of behavioral economics and behavioral psychology have identified both the positive (Hurlock, n.d.; Gibbons 1998; Prendergast 1999; Lazear 2000) and negative (Kohn 1999; Bénabou and Tirole 2006; Ariely, Bracha, and Meier 2009; Gneezy, Meier, and Rey-Biel 2011; Kamenica 2012; Pepper and Gore 2014) consequences of incentives, the relatively few studies on inducements in security studies has mostly normatively argued for the further studies on incentives or heavily relied on a handful of qualitative case studies of inducements. As such, a systematic study examining the effect of inducements are needed in security studies.

traditionally focused on sanctions and international political economy scholars on foreign aid, I study the two tools simultaneously, as it better reflects the reality of the two coexisting most of the time.

While policy practitioners have consistently used inducements – after all, the cases of sanctions are rarer than that of inducements – as part of an “exchange” for desirable behavior or “catalytic” means by changing the root behavior and preferences to match that of the inducer state (Nincic 2006; 2010), we as a field have focused much on sanctions, often forgetting the utility of inducements. The study of inducements in international relations is especially important for three main reasons. First, inducements are both reactionary and proactive. While sanctions and military force can mostly be used in reaction to another state’s action, inducements are particularly useful as they can serve as both reactive and proactive measures towards a state. Second, while sanctions require the sender state to be in a position of power to impose sanctions, as well as the capability to sustain sanctions, inducements are accessible to states within a wider range of power asymmetry, especially middle powers. Lastly, the sender state is left with fewer options if sanctions initially fail to achieve the desired outcome, potentially leading to military escalation. Conversely, starting with inducements may provide more leverage and legitimacy, especially if the failure was due to the target state not holding up their end of the deal. As such, my dissertation aims to bridge the policy-academy gap



by translating a perennial policy-level problem of “carrots vs. sticks” to an academic question assessing the utility and relative efficacy of inducements versus sanctions.

Building a theory of the utility and relative efficacy of inducements, however, presumes a prior theory that inducements and sanctions are not only different but also result in different downstream state behavior. Indeed, scholars have long theorized that inducements and sanctions are different foreign policy tools (Baldwin 1985; Cortright, Lopez, and Lopez 2002; Davis 1999; Dorussen 2001; O’Sullivan 2001; Nincic 2006; 2010; 2011; Solingen 2012; Long 1996; Ruloff and Bernauer 1999). However, there is no consensus or dominant theory on *how* and *why* inducements and sanctions are different. If the lifting of sanctions is thought of as a “carrot” and the stopping of inducements is thought of as “sticks,” then are carrots and sticks necessarily different? For example, meaningful behavioral change from the target states comes at the end of the sanctioning period, when the sender state lifts sanctions (Allen 2005), and as well, sender states often threaten to remove or rescind existing carrot-like policies to induce behavioral change from target states. In this dissertation, I empirically evaluate this assumption that inducements and sanctions are different by understanding the microfoundational logic of these tools.

This dissertation proceeds as follows. In this chapter, I first review the concept of positive and negative incentives and review the extant work on inducements and sanctions. In Chapter 2, I provide a brief review of related works in other fields before

providing a conceptual framework of inducements and sanctions within the domain of presence and absence of positive and negative outcomes. I argue the need to examine the microfoundational logic behind inducements and sanctions through experimental settings. Chapter 3 reviews three original survey experiments assessing how individuals perceive U.S. promises and threats to induce and sanction in China, India, and South Korea. My findings suggest that sanctions incite nationalism and a “rally around the flag effect” whereas inducements allow for the target state to “save face” while acquiescing to the sender state’s demands, implying that people prefer to concede their preferred policy in exchange for gains. Within my conceptual framework, I only find support when positive and negative outcomes are present, but not when absent. In Chapter 4, I take another look at individual-level microfoundations of carrots and sticks, presenting the results from an online experiment run in India. This experiment, like the survey experiment presented in Chapter 3, manipulated the conditions of carrots and sticks under which participants were asked to choose giving up or keeping something already in their possession. I find that even when stripped of any political context that may trigger certain emotions that may bias their responses, my results are consistent with that of an experiment riddled with political cues: Individuals are more likely to give up what they already have and change the status quo (e.g. a policy or change behavior as the sender states wishes) in the presence of positive outcomes, while less likely to do so in the presence of negative outcomes. Similar to the findings from Chapter 3, while the

effect of straightforward presence of positive and negative outcomes is clear, this is not the case in the absence of both outcomes (Lift Stick, Lift Carrot). Then, I spend Chapter 5 demonstrating not only that inducements and sanctions are different, but also examine how they have been utilized, and to what extent been effective in the case of North Korean nuclear proliferation. I specifically focus on the 1994 Agreed Framework and key agreements that resulted from the Six Party Talks (2003-2009). This chapter is based upon archival work of primary and secondary sources at the National Archives in the Busan, Daejeon, and Seongnam branches of South Korea, as well as interviews with a range of current and former government officials, scholars, and existing relevant sources on the topic. The final chapter concludes by highlighting the main contributions and discussing a myriad of ways to build off of the dissertation.

### ***1.1 Inducements and Sanctions as Economic Statecraft***

Economic statecraft is “intended to change the behavior of targeted actors by manipulating the costs and benefits they face” (Elliott 2010). Baldwin (1971, 1985) distinguishes positive and negative incentives of economic statecraft: Positive incentives, or positive inducements, are “actual or promised rewards” whereas negative incentives are “actual or threatened punishments.” Positive incentives can be offered with or without conditions. A conditional positive incentive is provided by the sender state in

exchange for some reciprocal action made by the target state as a true quid pro quo, in which both actors have something to gain from the exchange. While an unconditional positive incentive may not yield immediate tangible benefits from the sender state perspective, it may help foster a positive relationship between the sender and target states which could be beneficial in the long run. Negative incentives, on the other hand, can only be used conditionally as punishments or in reaction to an action or behavior. Similar to positive incentives, however, conditional negative incentives can be used to clarify leaders' values or function as indicators of intentions.

Regardless of type, the incentive is considered "effective" for the sender state if the target state complies with the sender state's demands. However, the underlying conditions for effective incentives differ between positive and negative incentives. "The benefit to the target from promised rewards for changing behavior must be greater than the perceived benefit to the target from staying the course" while the "costs of defiance imposed on the target by sanctions must be greater than the perceived costs to the target of complying with the sanctioner's demands" (Elliot 2010).

In order to better understand economic statecraft, Baldwin (1971) argued that we must do more to study positive incentives and their benefits. Despite Baldwin's call to study positive incentives as much as negative incentives, however, International Relations scholars have tended to focus on one or the other. In this section, I provide a literature review of inducements and sanctions in International Relations.

## **1.1.1 Inducements in Security Studies**

### **1.1.1.1 Inducements Can Work**

The inducement literature in international security generally agrees that positive incentives can be powerful instruments to turn conflict into cooperation (Dorussen 2001) as we can catch more flies with honey than vinegar. Incentives, rather than penalties, may be particularly well suited to the post–Cold War world, where globalization has made the economic isolation of any country difficult to achieve (O’Sullivan 2001; Haass Richard 1998) and, more importantly, maintain. As well, inducements seem to be a good initial policy as it can open the door for other policy options, even if they fail (O’Sullivan 2001). If we conceptualize foreign policy tools as on a spectrum, inducements on one end and military force at the other extreme, there are many levels of escalatory policies before reaching military force if we start with inducements. But because sanctions stop just short of military force on the spectrum, there isn’t much alternative escalatory policy options left to consider if sanctions fail.

Nincic (2006, 2011) and Solingen (2012) call for more scholarly investigation on carrots rather than sticks as coercive pressures or punitive measures have been historically counterproductive and unsuccessful. They argue that in the cases of Iran and North Korea, it is not unreasonable to argue that external threats triggered existential fears, which in turn helped justify their nuclear programs.

Beyond arguing the normative need to study inducements, Nincic (2006, 2010, 2011) has theorized how inducements should work by breaking down inducements into three types – symbolic, political, and economic – and two, exchange and catalytic, models of inducements. Symbolic inducements, like official visit and diplomatic recognitions, do not offer a tangible benefit to the target state but may provide psychological gratification. He distinguishes political inducements from symbolic inducements as offering explicit and direct political gains to the target state, like the European Union offering an accelerated track to EU membership to Serbia in exchange for its accepting Kosovo's full independence. Economic benefits include aid and investment. The exchange model is a simple quid pro quo model of transactions whereas the catalytic model effects further change by changing the root behavior and preferences of the target state.

The majority of studies on positive inducements have relied on rich case studies to examine how trade and technology incentives can affect interstate cooperation (Long 1996; Ruloff and Bernauer 1999; Solingen 2012) and how economic instruments in the form of economic assistance and investments are used for foreign policy gains (Davis 1999).

### 1.1.1.2 Inducements Can Backfire

Contrary to most existing literature claiming the positive benefits of inducements, Atran argues that economic inducements can be counterproductive when dealing with holy and sacred values as the target state may find the economic incentive as an offensive act intended to cheapen the sanctity of the issue (Atran 2016). Atran argues that token symbolic concessions, such as an apology for a perceived wrong that touches a sacred value, can instead be more important than material trade-offs in making peace. This suggests that people's reaction to negative versus positive incentives will be different based on the underlying issue at hand. For example, a quid pro quo exchange offer of aid in return for a weapon banned by international treaty may not ignite a counterproductive feeling from the target state. However, an exchange offer of aid for the mishandling of human rights conditions – which may be viewed differently based on different cultural norms – may instead create a “rally around the flag effect” of supporting current practices. Indeed, incentives can be exploitative, corrupting, or degrading and to offer an incentive can be callous or insulting, or could change the nature of a relationship for the worse (Grant 2002; 2011; 2006).

Drezner (2007) highlights another problem with carrots: false promises and its effect on the sender state's reputation. Indeed, opportunistic target states could agree to a quid pro quo but not hold the end of their deal after receiving the carrots. Even worse, countries could resort to extortion from certain sender states that have a record of using

carrots. Either of these cases would leave the sender state looking weak if they did not take retaliatory action. Drezner argues that sender states are more reluctant to use carrots for this reason (2007). Dealing with opportunistic or unreliable target states can be mitigated by distributing carrots in phases, only after verifying that the target state has taken concrete steps to uphold their end of the agreement.

### **1.1.1.3 Foreign Aid as Inducements**

While there exists a large variation in type (e.g. economic aid, joint military exercises, cultural and symbolic, etc.) and size of inducements, the most commonly studied type of inducement is economic aid, which is how I operationalize carrots in this dissertation. Much of the foreign aid literature examines who gives how much aid to whom (Alesina and Dollar 2000) and the efficacy of foreign aid. The efficacy question is typically posed in terms of how successful aid is in alleviating poverty or promoting economic growth (Burnside and Dollar 2000; Easterly, Levine, and Roodman 2004; Bermeo and Leblang 2015). The consensus is that the direction of aid can be dictated by political and strategic considerations (Alesina and Dollar 2000; Schraeder, Hook, and Taylor 1998; Büthe, Major, and de Mello e Souza 2012; Bearce and Tirone 2010; Maizels and Nissanke 1984; Berthélemy and Tichit 2004), in addition to actual economic needs of the state in question: Altruism is not a determinant of aid policies, but rather there exists



a clear linkage between the ideological posture of target states and the amount of aid they received from foreign aid donors (Schraeder, Hook, and Taylor 1998). Indeed, bribery has historically been and continues to be a standard means of conducting foreign policy (Morgenthau 1962): Numerous studies examine aid-for-policy deals in terms of shifting support at the United Nations in either General Assembly voting (Rai 1980; Dreher, Nunnenkamp, and Thiele 2008) or in terms of preferential treatment of nations elected to the UN Security Council (Kuziemko and Werker 2006; Vreeland and Dreher 2014). Others find, at least in the United States, that the provision of aid is driven by the interests of individual legislators based on the political economy of their districts (Milner and Tingley 2010).

Similar to positive incentives, there exists various types and sizes of negative incentives. For the purpose of this dissertation, I focus on economic sanctions as negative incentives. I highlight the rich literature debating the efficacy of sanctions below.

## **1.1.2 Sanctions in Security Studies**

### **1.1.2.1 Sanctions Don't Work**

Galtung looks at UN mandated sanctions against Rhodesia in response to Rhodesia's 1965 Unilateral Declaration of Independence from the UK (Galtung 1967). He argues that sanctions often create a rally round the flag effect wherein support for the ruling

regime in the target country actually increases in the face of external pressure. Galtung argues that this is the case as economic deprivation due to sanctions serves as a politically integrative, rather than a disintegrative, force in the target state. As well, it is hard to obtain universal application of sanctions due to both the unwillingness of some countries to participate and the fact that the target can work around the sanctions by gaining access to prohibited goods and services from elsewhere, like the black market or third parties outside the sanction regime. Galtung also notes that target states can work towards becoming economically and politically self-sufficient as a classic countermeasure against the imposition of sanctions. Similarly, Pape argues that the main reason sanctions fail is because of the nature of the target state (Pape 1997). "The key reason that sanctions fail is that modern states are not fragile. Nationalism often makes states and societies willing to endure considerable punishment rather than abandon their national interests. States involved in coercive disputes often accept high costs, including civilian suffering, to achieve their objectives. ...Even in the weakest and most fractured states, external pressure is more likely to enhance the nationalist legitimacy of rulers than to undermine it." The expectation that state cooperation will make sanctions more effective relies on two key assumptions: "that greater cooperation will increase the economic punishment on target states, and, more critically, that increased punishment will make targets more likely to concede." For this to work, Pape (1997) argues, economic punishments will have to be "dramatically higher" than they

have been in the past, and even this is only a "speculative possibility." Similarly, Kaempfer and Lowenberg believe that sanctions are not effective foreign policy tools, claiming that economic sanctions do not inflict large enough costs on the target countries to bring about any meaningful change (Kaempfer and Lowenberg 1992). So then, why do countries use sanctions if the conventional wisdom is that they don't work? Drezner argues that the paradox of sanctions stems from his findings that countries will be most eager to use sanctions under conditions where they will produce the feeblest results (D. W. Drezner 1999b). He counterintuitively argues that sanctions are more likely to be effective between allies rather than adversaries. This is because when adversaries expect frequent conflict between them, they are more willing to use sanctions against each other. However, precisely because they expect to be involved in more conflicts, the sanctioned state will not concede, despite the cost.

#### **1.1.2.2 Sanctions Can Work**

Others, however, argue that sanctions have the potential to produce partial policy changes at the very least (Laub 2015): Hufbauer et al. found that sanctions were partially effective in 40 out of 115 cases (34 percent) they studied (Hufbauer et al. 1990). Hufbauer et al. (Hufbauer et al. 1983; Hufbauer and Schott 1985; Hufbauer et al. 1990), argue that sanctions can be effective instruments, provided that economic and political

conditions in the target state are susceptible to their influence and depending on the nature of the goals sought by the sender. Indeed, even though Galtung (1967) argued that sanctions were generally ineffectual in terms of fulfilling the instrumental purpose of eliciting compliance from the target actor, he also observed that sanctions could perform a range of useful symbolic or “expressive” functions. “When military action is impossible for one reason or another, and when doing nothing is seen as a tantamount to complicity, then something has to be done to express morality, something that at least serves as a clear signal to everyone that what the receiving nation has done is disapproved of.” He saw sanctions as a tool for expressing and reinforcing international morality. Sanctions-optimistic scholars have correctly pointed out that there are conditions under which sanctions will be more effective than others. For example, bilateral and multilateral sanctions may result in different outcomes depending on the circumstances of which countries are involved in a multilateral sanctions regime (Shen 2008).

## ***1.2 Conclusion***

In this chapter, I defined and distinguished the carrots and sticks –positive inducements and sanctions—of economic statecraft. I argued that although both tools are frequently utilized in policymaking and often considered simultaneously, prompting

various debates on which to use when or to whom, inducements and sanctions have largely been considered separately in International Relations. The two tools differ not just in terms of theoretical concept and assumptions, but also in their policy implications (e.g. bureaucratic steps to enact, signaling intent, level of domestic and international support). However, because both are used with the same purpose -- to achieve the sender state's political goals-- we must evaluate the value of each tool in relation to the other. In this dissertation, I take up the task of bridging the policy-academy gap by bringing together these two tools, theorizing not only how carrots and sticks differ, but also why carrots work better than sticks to achieve foreign policy ends.

## 2. Conceptual Framework of Inducements and Sanctions

Because there is no general framework on inducements and sanctions in IR, I turned to the fields of psychology, behavioral economics, and neuroscience, in which the study of carrots vs. sticks is more established, to help conceptualize the logic behind the utility and relative efficacy of inducements and sanctions. In their seminal piece, “Bad Is Stronger Than Good,” psychologists Baumeister et al. (2001) argue that bad events overpower good events found in “everyday events, major life events, close relationship outcomes, social network patterns, interpersonal interactions, and learning processes.” Their comprehensive review finds that bad emotions, bad feedback, and bad information have a longer lasting impact than good ones as the bad is processed more thoroughly by the individual. They argue that this makes sense from an evolutionary perspective: “organisms that were better attuned to bad things would have been more likely to survive threats and, consequently, would have increased probability of passing along their genes” (Baumeister et al. 2001, p. 325). In short, survival requires us to pay more acute attention to possible bad outcomes rather than good outcomes, implying that avoiding bad outcomes is a stronger motivation than welcoming good outcomes.

The two notable exceptions to the “bad is stronger than good” were found in learning (Baumeister et al. 2001, pp. 334-337) and memory (Baumeister et al. 2001, pp. 343-344). In their review of the learning literature, Baumeister et al. found that some textbooks in learning and education argue that rewards are more effective than

punishment for learning purposes due to a variety of side effects of punishments (e.g. anger, disorientation, aggravation) that could interfere with optimal learning. Similarly, Baumeister et al. acknowledged that memory is most subject to a positivity bias because we selectively erase bad memories through minimization processes (Taylor 1991). Skowronski et al. (1991) found that memory biases for the self favor pleasant events by downplaying one's own bad experiences or behavior. This logic that the good outweighs the bad is highly prevalent in the parenting and pet training literature, which heavily relies on repeated learning and memory for behavioral change purposes. Despite Baumeister et al.'s compelling evidence that bad is stronger than good, why might carrots be more effective than sticks?

## ***2.1 Law of Effect and Operant Conditioning Model***

Observing the behavior of cats in home-made puzzle boxes, Thorndike (1898) theorized that behavior that is followed by pleasant or desirable consequences is likely to be repeated while behavior that is followed by undesirable consequences is less likely to be repeated. Known as the law of effect (Thorndike 1898), Thorndike believed that animals learn by trial and error: When the trial action results in satisfactory results, the animal draws a connection and association between the trial behavior and positive outcome. On the other hand, when the trial results in dissatisfactory results, the animal

does not form an association between that particular behavior and a positive outcome. For example, when a cat was first introduced to the puzzle box, the cat had to take various actions (e.g. scratching the wall of the box, pulling a cord, pushing a pole) in order to escape from the box. Naturally, Thorndike observed that cats took the longest amount of time to escape from the box when first constrained. But with repeated exposure to the same box and learning which behavior allowed them to escape the box, cats escaped more quickly and frequently. Thorndike observed that positive effect was the basis for future repeated behaviors as errors (e.g. scratching the side of box) that led to ineffective outcomes were less likely to be repeated through the cats' learning processes. Instead, Thorndike observed that following a negative outcome, the behavior of the animal was likely to be less predictable.

Expanding upon Thorndike's law of effect, Skinner (1938) introduced a model called Operant Conditioning. Operant Conditioning is learning produced by the active behavior of an organism interacting with the environment. Skinner believed that behavior is motivated by the learned consequences we face for the behavior. He introduced the concept of reinforcement and punishment with positive and negative types of each consequence. Under positive settings, something is being added to increase or decrease the likelihood of a behavior while under negative settings, something is being removed to increase or decrease the likelihood of a behavior. Skinner found that reinforcement increased the likelihood of a behavior, while punishment



decreased the likelihood of a behavior. As such, in positive reinforcement, a reward that follows a certain behavior acts as a reinforcing stimulus. In negative reinforcement, the removal of an unpleasant stimulus is rewarding. In order to test how we learn through operant conditioning, Skinner conducted a series of experiments on animals. He invented an operant conditioning chamber, also known as the Skinner Box, in which rats and pigeons were individually placed in to observe their reactions to specific stimuli. The Skinner Box contained a lever (for rats) or disk (for pigeons), a food dispenser, lights, speakers, and a recorder that counted the number of responses made by the animal. Skinner relied on different stimuli to observe the animals' behavioral learning process. For example, he observed how frequently and quickly the animals pulled the lever or disk when they learned that taking such action resulted in food being dispensed. The positive consequence of receiving food when pressing the lever or disk ensured that the animals would repeated the action over and over again when put in the same box. Similarly, when animals were first placed in a box with an unpleasant, loud noise coming from the speakers, animals would move around the box until they would accidentally knock the lever. Knocking the lever or disk immediately resulted in the loud noise stopping. As such, animals quickly learned to push the lever after repeatedly being put in the same box. The consequence of removing a bad outcome resulted in repeated, predictable behavior. In sum, Skinner found that rewards — whether it be rewarding

with new food or rewarding by removing the loud noise—led to the predictability of learned behaviors repeating.

The parenting literature finds some consensus through Skinner's Operant Conditioning Model: positive reinforcement works better and faster than punishment (Hurlock 1924, 1931; Maag 2001; Scott et al. 2021). How positive reinforcement demonstrates good parenting varies across outcomes. For example, Kan and Tsai (2007) find that positive reinforcement (e.g. praises, awards) positively affects children's educational outcome (adolescents' education expectation and aspirations from themselves). Arredondo et al. (2006) argue that parenting styles on children's health behaviors (e.g. physical activity and diet) even influence a child's risk for obesity. In their 2006 study of Latino parents and their children (aged kindergarten through second grade), Arredondo et al. found that positive reinforcement and monitoring was associated with children's healthy eating habits and exercise. For example, parents who set appropriate limits "and consequate healthy eating with either tangible (e.g. stickers) or intangible (e.g. praise) reinforcers are more likely to have children who eat healthy" (Arredondo et al. 2006, p.862)

Like the parenting literature, various studies looking at workplace efficiency find that workers are more efficient when they are motivated by potential carrots rather than the fear of getting fired (Prendergast 1999; Pepper and Gore 2014; Gibbons 1998). As well, some works in neuroscience suggest that rewards may be more effective than

punishment because the brain encodes positive information better than negative information (Ruff and Fehr 2014; Guitart-Masip et al. 2012; 2014). Borrowing upon the findings and some key concepts from these fields, I conceptualize positive inducements and sanctions within a framework of presence and absence of positive and negative outcomes below.

## **2.2 Conceptual Framework of Carrots and Sticks in IR**

Similar to Skinner’s Operant Conditioning Model which includes positive and negative reinforcement and punishment, my framework consists of a presence or absence of positive and negative outcomes. The underlying assumption is that economic carrots and sticks are used by the sender state to achieve favorable behavioral changes by the target state.

**Table 1: Presence and Absence of Outcomes Framework**

	Positive Outcome	Negative Outcome
Presence	Carrot	Stick
Absence	Lift Stick	Lift Carrot

Under the presence conditions, a new — positive or negative--outcome is presented to encourage favorable behavioral change. Under the absence conditions, an existing positive or negative outcome is removed to encourage favorable behavioral

change. Let's return to some of the real-life examples from Chapter 1. Recall that the Biden administration threatened to use (and actually did use) sanctions to restore democracy in Myanmar after a coup. In this case, the sender state (U.S.) is using a stick that would result in a negative outcome (e.g. denying export licenses) to persuade and coerce the target state (Myanmar) to accept the democratic election results (favorable behavioral change). The IMF promising to give Ukraine \$5.5 billion USD in exchange for a Ukraine meeting the IMF's anti-corruption benchmarks is an example of an actor using a carrot (\$5.5 billion USD is the positive outcome for Ukraine). President Trump threatening to cut already-promised aid to Honduras if the migrant caravan is not stopped falls under the absence-positive outcome (Lift Carrot) quadrant. And President Obama lifting existing sanctions on Iran for their compliant behavior falls under the absence-negative outcome (Lift Stick) quadrant.

Working within this Presence-Absence Framework, I expect to find the tools within the domain of positive outcomes to have a different effect than those within the domain of negative outcomes. Based on the findings of Skinner (1938), and many others discussed above, I expect that policies that result in a positive outcome (Carrot, Lift Stick) for the target state will be more effective than those that result in a negative outcome (Stick, Lift Carrot). It should be noted that "effectiveness" is from the sender state's perspective: the effectiveness of a carrot or stick depends on whether the target state changes its behavior to the liking of the sender state due to the action the sender

state took. My expectations are based on Thorndike, Skinner and many others' intuitive findings that a satisfactory, positive outcome makes it more likely that an actor will repeat the behavior that results in the positive outcome. However, given that I am applying my framework in the context of international politics, where states usually have either had a long history of inter-state interaction with one another, or at least have access to the other state's reputation, I expect that the identity of the actor sending the carrot or stick may matter to the actor receiving the carrot or stick. Much like in parenting, where children learn and develop their own interpretation of their parents' parenting style, the relationship between the sender and target state may bias the receiver's expectation of a positive or negative outcome being realized.

This makes sense in the context of international politics: Face negotiation theory (Brown and Levinson 1978; Brown, Levinson, and Levinson 1987) similarly predicts inducements to be more effective than sanctions assuming that leaders who concede to inducements can "save face" better than leaders who concede due to sticks. Assuming that the target state leader faces both domestic and international audience costs, it is much easier to justify conceding to the sender state's demands if you benefit (positive outcome) from the concession than not (negative outcome). As well, the graduated and reciprocated initiatives in tension reduction (GRIT) strategy (Osgood 1962) suggests that inducements may be more effective as they allows trust between the two actors to increase through gradual offering and accepting of inducements.

## 2.2.1 Expectations

To summarize the general expectations derived from my Presence-Absence Framework:

H1 (Difference): Actors treated with inducement-type policies (Carrot, Lift Stick) that include positive outcomes will respond differently than those treated with stick-type policies (Stick, Lift Carrot). As the starting point of this research, I expect to find that inducements and sanctions do indeed work differently and are not merely the same tool of coercion, as Pauly suggests (Pauly 2019).

H2 (Direction): Actors treated with inducement-type policies (Carrot, Lift Stick) will respond more positively to the sender state's demands than those treated with stick-type policies (Stick, Lift Carrot). The logic behind this quid pro quo expectation is that the benefits of the exchange simply "outweigh the costs of the reciprocating gesture" (Nincic 2011).

H3 (Favorability): Individuals with strong negative priors about the sender state will not support acquiescing to sender state's demands. Even at a product-level, negative priors or stereotypes that person has towards a country affects their judgment of quality and purchase value of a product based on the country-of-origin (W. R. Smith 1993; Ahmed and d'Astous 1995; Balabanis and Diamantopoulos 2004). At an

interpersonal-level, a similar logic of a self-fulfilling prophecy of prior negative stereotypes negatively affecting interpersonal interactions applies (Sibicky and Dovidio 1986).

In order to test these hypotheses and better understand the microfoundational logic of inducements and sanctions, I fielded four separate experiments, recruiting adults living in China, India, and South Korea. Analyzing individual responses to understand the intricacies of state-level foreign policy may seem conflicting at first.

### **2.2.2 Public Opinion and Foreign Policy**

Indeed, many scholars have long examined the role of public opinion and foreign policy (B. I. Page and Shapiro 1983; Risse-Kappen 1991; James and Oneal 1991; B. Page and Shapiro 1992; Bartels 1991; Hinckley 1988). The debate ensues between those who argue that public opinion influences foreign policy (Aldrich, Sullivan, and Borgida 1989; Baum 2004; Aldrich et al. 2006) and those who argue that public opinion does little to constrain actual policy (McCormick and Black 1983; Lindsay and Ripley 1992; Guisinger 2009; Bartels 1991).

Even among those who concede that public opinion matters in foreign policy, there exists a debate in the direction of influence. Some argue that the relationship is top-down (Berinsky 2007; Zaller and R 1992; Brody 1991; Berinsky 2009) while others

argue that the direction is bottom-up (Enns 2014; Saeki 2013; Steenbergen, Edwards, and de Vries 2007; Kertzer and Zeitzoff 2017). In other words, some make the case that elites influence the public's opinion on foreign affairs, while others argue that the public's cues influence elite behavior on foreign policy. As such, surveying the public can be a good measure of the type of pressure the public may bring to the bear on policymakers, or at least the sentiments that they would be holding, which might influence the political leaders.

Relatedly, scholars have questioned the generalizability of public opinion to elite attitudes and behavior, as they have different preferences, commitments, and even psychological traits from the rest of the public (McClosky 1964; Hafner-Burton, Hughes, and Victor 2013; B. I. Page and Barabas 2000). Recently, however, scholars have increasingly found that the public-elite gap is not as stark, but rather quite similar in how they both think and behave (Kertzer 2020; Findley et al. 2017; Mintz, Redd, and Vedlitz 2006; Sheffer et al. 2018). As such, surveying the public can produce proxies for how decisionmakers themselves might feel and respond.

While several debates are still ongoing, I believe that public opinion and studies that involve ordinary individuals, at a minimum, allow us to explore critical elements of our puzzles. As well, it can help us better understand the microfoundations of important issues, which is precisely the goal of the following two chapters.



### **3. Experimental Microfoundations of Positive Inducements and Sanctions I: Evidence from China, India, and South Korea**

#### ***3.1 Research Design***

To test the hypotheses outlined in Chapter 2, I fielded three online survey experiments<sup>2</sup> in Fall 2019, 2020 in China, India, and South Korea via Dynata,<sup>3</sup> a firm that maintains online participant panels. Dynata has been frequently utilized for recent academic research (Kimball 2019; Lutfeali et al. 2020; Kahane 2021; Ruiz and Bell 2021). The survey took approximately 10 minutes to complete and was administered to 1502 adults in China, 1624 adults in India, and 1530 adults in Korea.<sup>4</sup> While the surveys were conducted in Chinese, English, and Korean, respectively, the open-ended answers were translated back to English<sup>5</sup> and I report and discuss the study results in English for the purpose of convenience.

---

<sup>2</sup> This research was reviewed by the Duke University Campus Institutional Review Board (Protocol #: 2019-0320).

<sup>3</sup> Formerly known as Survey Sampling International. The survey firm has been widely utilized for academic research purposes, including in political science (Berinsky, Margolis, and Sances 2014; 2016; Claassen and Ryan 2016; Morin-Chassé 2018; Mildenerger and Tingley 2019).

<sup>4</sup> These are the final analytical samples after dropping those who sped through the survey (less than 2 minutes) and failed the attention check.

<sup>5</sup> The Chinese survey was translated by Dynata from English to Chinese before launching and from Chinese to English for the open-ended responses after collection. I translated the Korean survey from English to Korean and from Korean to English myself.

After answering questions about their attitudes on politics and foreign policy, a battery of political knowledge questions, and questions as to how favorably they view key global countries, participants were randomly assigned to one of two vignettes for the actual experimental portion of the survey, and further randomly assigned to one of the five groups (one control and four treatment groups), before answering several questions following the vignette. The survey concluded by collecting their demographic information and debriefing the participants about the goal of the survey and clarifying that the vignette that they had read contained fabricated information for the purpose of the study.

### **3.1.1 The Case for Three Countries and Two Types of Offense**

The experiment itself consists of a hypothetical scenario in which the United States intelligence community publicly reports that the target state in question has violated an international treaty. Because target state respondents may view the United States' threat to punish their government's offense as legitimate or not based on the respondents' priors on the degree of or type of offense, as the moral judgment literature suggests (A. R. Damasio 1994; H. Damasio et al. 1994; Greene and Haidt 2002; Waldmann, Nagel, and Wiegmann 2012), I consider two types of offense: a traditional security related offense (violation of the Convention on Cluster Munitions) and a non-

security related offense (violation of international human rights in treatment of domestic political dissidents). For the security offense, the Convention on Cluster Munitions, an international treaty that not many participants know much about, was purposefully chosen so as to minimize prior beliefs on the subject matter biasing their answers. For the non-security offense, human rights violation was chosen as it is an issue in which all four types of strategies are regularly used in practice (Dasandi et al. 2021). As well, the relationship between public opinion and foreign policy related to human rights has been of consistent interest to scholars (Luard 1980; Pritchard 1991; Holsti 1996; Pedaliu 2007; Forsythe 2002; Allendoerfer 2017; Kinzelbach 2019), although the majority of studies have examined the relationship from the sender state's perspective.

I conducted the same survey in three separate countries as scholars have long theorized that which foreign policy the sender states chooses or how effective that policy is may depend on the relationship—specifically that of allies and adversaries-- between the target state and sender state (D. W. Drezner 1999b; Miller 1999; D. W. Drezner 2002; D. Drezner 2007; Rudloff, Scott, and Blew 2013; Izumikawa 2013; Breen 2015; Yarhi-Milo, Lanoszka, and Cooper 2016). Because the main sender state in my study is the United States, I ran the experiment in countries that have different relationships with the United States: China is the proxy for an adversary, South Korea is the proxy for an ally, and India is the proxy for a country with a neutral relationship with the U.S. While there exist many other combinations of U.S. ally, adversary, and neutral states, I decided on

this specific set of countries for three main reasons. First, to minimize potential response bias due to stark cultural differences (Si and Cullen 1998; He and van de Vijver 2012), I wanted all three countries to be from the same region. Second, to make the hypothetical vignettes credible for respondents, it was important to choose three countries that have 1) an immediate security threat, as well as 2) domestic human rights issues, whether real or perceived. Third, having all three countries be key regional actors that have had a long history of interacting with the United States was important in order to increase the credibility of the treatment conditions. For example, while I could have chosen a small Pacific island-nation that has a “neutral” relationship with the United States, the neutrality stemming from a lack of interactions would be categorically different from a neutrality despite the consistent ups and downs of frequent interactions.

Recognizing that there exists variation within each country as to how individuals feel about the United States, I asked the participants to rate how favorably they view a number of states, including the United States, as a pretreatment measure. In a matrix form, participants fill out their favorability ratings of the United States, Russia, United Kingdom, China, and France on a 7-point Likert scale, ranging from Very Favorable (1) to Very Unfavorable (7). I include all P5 countries in the matrix to avoid evoking a singular emotion about the United States prior to the experiment.<sup>6</sup>

---

<sup>6</sup> I exclude “China” as an option for the survey run in China.

I describe the details of the scenario below.

### 3.1.2 Vignettes

#### 3.1.2.1 Security Vignette: Convention on Cluster Munitions (CCM)

In the traditional security offense, I describe a scenario in which the target state has been found maintaining a stockpile of cluster munitions, despite being a signatory of the Convention on Cluster Munitions which bans the possession of cluster munitions. I describe the negative effects of cluster munitions before stating the target state government's position that these weapons were developed for purely defensive measures, citing national security concerns. The vignette concludes with the target state government refusing to give up the weapons.

U.S. intelligence sources reported that [China/India/Korea] has been stockpiling (keeping) cluster munitions. Cluster munitions are weapons that do not distinguish between civilians and combatants. These weapons can also leave behind unexploded bombs which can harm civilians and be bad for economic and social development for many years after use.

[China/India/Korea] is a member of the Convention on Cluster Munitions (CCM), which is an international treaty that prohibits stockpiling (keeping) cluster munitions and requires destruction of those weapons.

The [Chinese/Indian/Korean] government has argued that these cluster munitions are for purely defensive purposes, given the uncertain times in world affairs. [Control/Sanction/Aid/Cut Aid/Lift Sanction]\*. Your government has refused to give up the cluster munitions, citing national security concerns.

**Figure 1: Security Vignette: Convention on Cluster Munitions (CCM)**

### 3.1.2.2 Non-Security Vignette: Human Rights (HR)

In the non-security offense, I describe a situation in which the target state is found to be in violation of international human rights. The charges are for the arbitrary arrest, detention, and ill treatment of political dissidents. I also give a simple definition of who political dissidents are, before telling the subjects that the target state government does not acknowledge the violations, citing a difference in cultural norms and national security concerns. The human rights vignette concludes by noting the target state government's refusal to enact policies to better treat political dissidents. The target state's refusal to change the status quo citing national security concerns at the end are the same across the two vignettes.

U.S. intelligence sources reported that [China/India/Korea] is in violation of international human rights for the arbitrary arrest, detention, and bad treatment of political dissidents. Political dissidents are people who openly disagree with the current government.

The [Chinese/Indian/Korean] government has argued that there are differences in cultural norms and expectations of treating political dissidents.

[Control/Sanction/Aid/Cut Aid/Lift Sanction]\*. Citing differences in cultural norms and national security concerns, the [Chinese/Indian/Korean] government has refused to enact policies to better treat political dissidents.

**Figure 2: Non-Security Vignette: Human Rights (HR)**

### 3.1.2.3 Control and Treatments Conditions

All participants were randomly assigned to one of five groups: Control, T1: Sanction, T2: Aid, T3: Cut Aid, and T4: Lift Sanction. In the control condition, the vignette does not mention anything about the United States' reaction to the intelligence report. The four treatment groups all include a U.S. reaction to the report, which involves either a promise of carrots or threat of sticks unless the target state government changes the status quo. In the security vignette, the target state is asked to give up cluster munitions; in the human rights vignette, the target state is asked to enact policies to improve the treatment of political dissidents.

To aid in conceptualizing the amount of money (presented in local currency: yen for China, crores for India, and won for Korea) that each promise/threat is worth, I provide supplementary information on how many jobs that amount of money would sustain in a specified industry. For cross-comparability purposes, the number of 100 million (China and India) and 500,000 (Korea) jobs was deliberately chosen to reflect approximately 1 percent of the entire population in each of the countries. As well, I chose export-oriented industries for all three countries (agricultural for India and technology for China and Korea). Based on average income for someone working in that industry and the number of jobs calculation from above, I estimated the total amount that the United States was offering or threatening.

In the Cut Aid and Lift Sanction conditions, I chose the year 1994 to indicate how long the target state had been sanctioned for or receiving aid for. I chose a year in the 90s in hopes that the majority of respondents would not recognize that it was fabricated information.<sup>7</sup> For cross-comparability purposes, I used 1994 in both the Lift Sanction and Cut Aid conditions. The specific wording of these conditions can be found below.

After reading the vignette, respondents were asked a question to check that they had read and understood the vignette. To measure the main dependent variable, participants were asked if they supported or opposed their government's refusal to change the status quo on a 7-point Likert scale [1 = Strongly Oppose; 7 = Strongly Support]. They were then asked to share why they supported or opposed their own government's stance in an open-ended response, and asked how likely it was that the U.S.-led coalition would follow through with their promise or threat [7-point Likert scale, 1 = Very Unlikely; 7 = Very Likely].

---

<sup>7</sup> It is more likely that respondents will remember events from more recent years like 2018, for example.



**Control:** Sentence omitted.

**Sanction:** Sanction the export-oriented [agricultural/technology] industry worth about [local currency based on 10 million/500,000 industry jobs] per year (around [10 million/500,000 agricultural/technology] jobs) unless your government [gets rid of cluster munitions/enacts policies to improve the treatment of political dissidents].

**Aid:** Provide [local currency based on 10 million/500,000 industry jobs] annually that will sustain around [10 million/500,000 agricultural/technology] jobs each year in exchange for [getting rid of cluster munitions/enacting policies to improve the treatment of political dissidents].

**Cut Aid:** Cut off [local currency based on 10 million/500,000 industry jobs] worth of annual aid [China/India/Korea] has enjoyed since 1994 that sustains around [10 million/500,000 agricultural/technology] jobs unless your government [gets rid of cluster munitions/enacts policies to improve the treatment of political dissidents].

**Lift Sanction:** Lift existing sanctions imposed in 1994 on the export-oriented agricultural industry worth about [local currency based on 10 million/500,000 industry jobs] per year (worth around [10 million/500,000 agricultural/technology] jobs) unless in exchange for [getting rid of cluster munitions/enacting policies to improve the treatment of political dissidents].

Note: Agricultural jobs were used for India and technology jobs were used for both China and Korea. The number "10 million" was used for China and India and "500,000" was used for Korea.

**Figure 3: \*Control and Treatment Conditions Wording**

### 3.1.3 Specific Expectations

I derive three testable, specific hypotheses from my conceptual framework in Chapter 2, as discussed below.

H1: Individuals treated with inducement-type policies will respond differently than those treated with stick-type policies. Under the Presence-Absence Framework, I expect Carrot (Aid) and Lift Stick (Lift Sanction) to move in the same direction, while I expect Stick (Sanction) and Lift Carrot (Cut Aid) to have the opposite effect.

H2: Individuals treated with inducement-type policies will respond more positively to the sender state's demands than those treated with stick-type policies. In other words, those treated with Aid and Lift Sanction should be less likely to support their own government's refusal to change the status quo. Conversely, those treated with Sanction and Cut Aid should be more likely support their own government's policy to not change the status quo. This expectation is consistent with the intuitive narrative that external threats lead to internal unity, creating a rally around the flag effect, that has long been studied and is generally well accepted (A. R. Damasio 1994; H. Damasio et al. 1994; Greene and Haidt 2002; Waldmann, Nagel, and Wiegmann 2012).<sup>8</sup>

H3: Individuals with strong negative priors about the sender state will not support acquiescing to the sender state's demands. Even at a product-level, negative priors or stereotypes that person has towards a country affects their judgment of quality and purchase value of a product based on the country-of-origin (W. R. Smith 1993; Ahmed and d'Astous 1995; Balabanis and Diamantopoulos 2004). At an interpersonal-

---

<sup>8</sup> For an excellent review of the literature on conflict and cohesion, see (Stein 1976).

level, a similar logic of a self-fulfilling prophecy of prior negative stereotypes negatively affecting interpersonal interactions applies (Sibicky and Dovidio 1986). Thus, at the state-level, I expect the similar logic to hold: As the unfavorability rating of the United States increases, the support for one’s own government should increase. Because *US Favorability* is measured on a 7-point Likert scale in reverse order, ranging from Very Favorable (1) to Very Unfavorable (7), I expect the coefficient sign to be positive.

**Table 2: Summary of Expectations**

	Support [Own] Government
Carrot	-
Stick	+
Sanction	+
Aid	-
Cut Aid	+
Lift Sanction	-
US Favorability	+

### **3.1.4 Model Specifications**

Using an ordered logit model, the main dependent variable of support for the [Chinese/Indian/Korean] government was regressed against the treatment measures of Sanction, Aid, Cut Aid, and Lift Sanction. It is important to note that the results of the treatments are compared to the baseline of Control, in which the United States does not

induce or threaten to punish the target state. To compare the relative efficacy of the treatments, the four conditions were aggregated to Carrot (includes Aid and Lift Sanction) and Stick (includes Sanction and Cut Aid). The level of support for their own government was measured on a 7-point Likert scale, ranging from “Strongly Oppose” (1) to “Strongly Support” (7). A variety of other covariates that may influence the individual’s support for the Indian government’s policy were also included. These controls include pre- and post-treatment measures of how favorable the individual views the United States (7-point Likert scale, ranging from “Very Favorable” (1) to “Very Unfavorable” (7)), party identification with current ruling majority party (binary)<sup>9</sup>, education, gender, and age.<sup>10</sup> Those who hold favorable views of the U.S. may be more likely to agree with the United States’ assessment of their own government’s policy and therefore oppose their own government’s policy. The other covariates (income and education) are included because the more satisfied the respondent is with the status quo (e.g., identify with current ruling party, have higher income), the more

---

<sup>9</sup> In the case of China, respondents were asked if they are a member of the Chinese Communist Party (CCP). The answer choices are: “Yes” (1) and “No” (0). In the cases of India and Korea, respondents are asked which party they feel closest to with all the major parties shown as an answer choice, with the option to select “Other” and write in another party. I then created a dummy variable to easily distinguish whether they support the current majority-ruling party or not: “Bharatiya Janata Party (BJP)” (1) and all other responses (0) for India and “Democratic Party” (1) and all other responses (0) for Korea.

<sup>10</sup> Favorability measures by country were taken pre-treatment while demographic information was collected post-treatment in order to minimize response bias.

the respondent may be likely to support their own government's decision to defend the status quo.

### **3.2 Results**

In general, I find strong support for carrots over sticks from the sender state perspective. Respondents are much more likely to want their own government to heed the sender state's demands when a carrot (Aid, Lift Sanction) is offered in exchange for the change in status quo than when the sender state threatens to punish (Sanction, Cut Aid) if the status quo does not change. The results are consistent with my expectations that 1) inducements and sanctions are different and 2) inducements are more likely to work in the favor of the sender state. However, I find that not all carrots are equal: Further disaggregating carrots and sticks reveal that straightforward Aid, rather than Lift Sanction, is mostly driving the results. These findings suggest that new and direct types of carrots (Aid) may elicit more support for concessions than indirect carrots that remove an existing stick (Lift Sanction).

**Table 3: Summary of Expectations and Results (China, India, Korea)<sup>11</sup>**

	Expectation	Aggregate	China	India	Korea
Carrot v. Stick	-	-	+	-	-
Sanction	+	-	-	-	+
Aid	-	-	-	-	-
Cut Aid	+	-	-	-	-
Lift Sanction	-	-	+	-	-
Aid v. Sanction	-	-	+	-	-
Lift v. Cut	-	-	+	-	-
US Favorability	+	+	+	-	-

Table 4 shows the results from the three countries separately and as an aggregate. The treatments were coded as a categorical variable with five levels: Control, Sanction, Aid, Cut Aid, and Lift Sanction. Since Control was used as the reference level, the variable = 1 for responses treated with the specific treatment and 0 for the responses in the control conditions. I find strong statistical support for Aid in India, Korea, and at the aggregate level. Lift Sanction—another form of carrot—is also negative and statistically significant in India. In contrast to carrots, I do not find any statistical significance for either types of sticks (Sanction, Cut Aid), and both stick-type treatments are generally in the opposite direction from what I expected.

---

<sup>11</sup> For full regression results disaggregated by country, see Appendix D.

**Table 4: Ordered Logit Model (4 Treatments)**

	<i>Dependent variable: Gov't Support</i>			
	Total (1)	China (2)	India (3)	Korea (4)
Sanction	-0.010 (0.081)	-0.134 (0.144)	-0.014 (0.136)	0.188 (0.143)
Aid	-0.312*** (0.082)	-0.060 (0.144)	-0.621*** (0.140)	-0.26* (0.145)
Cut Aid	-0.093 (0.081)	-0.082 (0.146)	-0.163 (0.138)	-0.042 (0.144)
Lift Sanction	-0.112 (0.083)	0.016 (0.146)	-0.252* (0.140)	-0.066 (0.145)
US Favorability	0.058*** (0.014)	0.118*** (0.024)	-0.081*** (0.022)	-0.038*** (0.035)
Party	0.346*** (0.053)	0.228** (0.108)	0.734*** (0.094)	0.826*** (0.093)
Education	0.013 (0.021)	0.118** (0.047)	0.020 (0.036)	-0.040 (0.034)
Age	-0.004* (0.002)	-0.007 (0.005)	0.004 (0.004)	-0.002 (0.003)
Gender	-0.068 (0.052)	0.204** (0.094)	0.049 (0.089)	-0.124 (0.094)
Observations	4,636	1500	1611	1525
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01			

In general, I only find statistical support for my hypotheses from India and Korea but not China. In the Chinese case, none of the treatment conditions are statistically significant, but also the only treatment variable that is in the same direction as I expected is Aid. While I do not find any conclusive results from China to support my argument

that carrots work better than sticks, I do find strong support for H3: the more unfavorable the United States is to the participant, the more likely that they will support the Chinese government not conceding to U.S. demands to change the status quo. Nearly half (47.07%) of Chinese respondents held an unfavorable view [Somewhat Unfavorable (5), Unfavorable (6), Very Unfavorable (7)] of the United States.

**Table 5: U.S. Favorability Measure (Collapsed)**

	Favorable (1-3)	Unfavorable (5-7)
China	33.36%	47.07%
India	66.13%	24.97%
Korea	56.01%	15.95%

Conversely, a counter-intuitive result was found in India and Korea: the more favorable the respondent's view towards the U.S., the more likely one is to support their own government. In India, almost two thirds (66.13%) of the respondents indicated that they hold favorable views of the United States [Very Favorable (1), Favorable (2), Somewhat Favorable (3)]. In contrast, less than a fourth (24.97%) of the participants indicated unfavorable views. Similarly, more than half of the Korean respondents held favorable views of the United States. These results suggest that having a negative view of the sender state will lead to supporting one's own government regardless of the



action the sender state makes, but having a positive view of the sender state does not guarantee willingness to cooperate either. Relatedly, and consistent with the existing literature on partisan divergence over foreign policy (Rathbun 2007; Milner and Tingley 2013; Wallace 2013; Chilton 2015; Ripberger, Jenkins-Smith, and Herron 2011), I find very strong support for partisan identification. In all three countries, I find that those who identify with the current majority-ruling party are more likely to support the government's decision to defy the United States.

Because the results shown in Table 4 compare each treatment against the control, I also measure the relative efficacy of Carrots versus Sticks, Aid versus Sanction, and Lift Sanction versus Cut Aid in Table 6 below. The dummy variable Carrot is coded as 1 when either Aid or Lift Sanction conditions were shown and coded as 0 when either Sanction or Cut Aid conditions were shown. Similarly, dummy variable Aid is coded as 1 when respondents were treated with Aid and as 0 when treated with Sanction. And lastly, Lift Sanction is coded as 1 when respondents were treated with Lift Sanction and as 0 when treated with Cut Aid. These direct comparisons of carrots and sticks provide even stronger support for my hypotheses: Carrots work better than sticks. However, not all types of carrots are not equal, as shown in the disaggregated direct comparisons of Aid vs. Sanction and Lift Sanction vs. Cut Aid. This could be due to the fact that the treatment conditions for removing an existing carrot or stick were longer and therefore harder to understand. It may be harder to conceptualize the effect of discontinuing a

relationship or transaction with a long history (e.g. cutting annual aid that they had been receiving since 1994 or lifting sanctions that had been in place since 1994). Interestingly, the lack of consistent and clear results in the absence of a positive or negative outcome is observed again in Chapter 4. One obvious implication from these results is that I need to better theorize the differences between the novelty of new and direct carrots and sticks versus indirect actions by lifting existing carrots and sticks.

**Table 6: Carrot v. Stick Comparison Models**

	<i>Dependent variable: Gov't Support</i>		
	Carrot v. Stick	Aid v. Sanction	Lift v. Cut
	(1)	(2)	(3)
Carrot	-0.161*** (0.058)		
Aid		-0.302*** (0.082)	
Lift Sanction			-0.019 (0.082)
US Favorability	0.060*** (0.016)	0.064*** (0.023)	0.053** (0.022)
Party	0.335*** (0.059)	0.284*** (0.084)	0.381*** (0.084)
Education	0.005 (0.023)	-0.009 (0.033)	0.017 (0.032)
Age	-0.005* (0.002)	-0.008** (0.003)	-0.001 (0.003)
Gender	-0.060 (0.058)	-0.071 (0.083)	-0.050 (0.083)
Observations	3,708	1,865	1,843
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Reading through the open-ended responses as to why a participant supports or opposes their government's decision to not change the status quo was critical. Stick-type policies seemed to provoke nationalistic sentiments, prompting participants to rally around the flag and support their own government, even in some cases where they did not identify with the current majority-ruling party. Conversely, when treated with carrot-type policies, respondents demonstrated a more transactional understanding of the situation. Some, for example, explained that despite not liking being told what to do by another country, the economic benefits were worth the exchange. Most importantly, some participants noted that changing a [bad] policy in return for economic benefits and the added bonus of returning to good international standing did not "make [their] government weak." This implies that target state elites may successfully justify their concessionary behavior in return for economic benefits to their domestic audience. In other words, positive inducements allow transactions to be framed as a win-win situation.

Indeed, some respondents had malicious intent in wanting to acquiesce to U.S. demands when treated with carrots. As some would infer, these participants suggested that their government take the economic incentive because they could always reverse back to the existing policy afterwards. In other cases, knowing that the country had the technological know-how and capability to rebuild the cluster munition stockpile was enough. These types of reasoning point to the potential problems of inducing target

states with carrots: Even if the initial exchange is successful, as my experimental evidence would suggest, target states may begin to repeatedly engage in bad behavior as a form of extortion rather than out of sincere intent. I provide select open-ended answers from both the cluster munition (CCM) condition and human rights (HR) condition below.

### **Nationalism**

- "It's our nation. We know which is safe and not."
- "Our government knows what is good, not United States Intelligence. US should not dictate us."
- "Do not be coerced by the United States"
- "We must not be led by the nose by others"
- "Why must we listen to everything America tells us to do?"
- "America is hypocritical. I support my country"
- "I believe my country, not American intelligence report"
- "The Chinese nation is a great nation. A huge country is protecting itself for the benefit of its own people and the country."
- "United States hasn't give them up, so why must we do it? This is the despicable way in which Americans do things. Look at what happened to Gaddafi."
- "I trust my country"

### **Economy**

- "The budget allotted for this can be used for agriculture."
- "I support the agricultural jobs around and we should produce the crores of the value."
- "Because we need improve our economy"
- "The economic benefit of giving up these weapons far outweigh the benefit of keeping cluster munitions. We can use alternative weapons for defense purposes"
- "Our generation needs more job opportunity"
- "Get money and prevent other countries from overtaking us economically"

### **Ethics**

- "It is a very dangerous weapon and will be harmful to the civilians."
- "People are the most important resource of country. Safety of them is a primary concern"

### **National Image**

- "It gives a positive image to our country"
- "We must return to good international standing"

**Figure 4: Select Open-Ended Question Responses (CCM)**

### **Nationalism**

- “Because my government is good”
- “I have full trust in decisions taken by my government as compared to U.S. statements. I believe there must a logical reason behind their decision. It will be a financial loss but I believe we can work out something to solve this issue. ”
- “I don't like other governments telling us whether we are right or not”
- “We have different cultural norms and understanding than America. We are not bad for being different, America needs to change its mind”
- “We are a democratic country and we should not work according to other countries reports or interference. Rather it should form a committee within the country to decide itself.”
- “I am not sure to confidently support our government, despite the US-led coalition’s promise to give money is a good thing but I slightly support our Indian government because I am a[n] Indian”

### **Economy**

- “I think if other country is helping on the basis of reliable facts then India should not oppose that”
- “I will support for agriculture”
- “Have to improve the unemployment in nation”
- “Because that affect jobs.”
- “The government's decision will affect the farmers who will lose the aid for agricultural jobs.”
- “We should not pay the penalty”
- “I don’t understand why the government is resisting despite the great economic incentives America is offering”
- “I think it would help our economy”

### **Ethics**

- “Because my country has a terrible history when it comes to protecting human rights and needs to do much more to protect them.”
- “Basic tenant of Democracy is free speech and equality hence I do not support my government's decision.”

**Figure 5: Select Open-Ended Question Responses (HR)**

The open-ended answers were also informative in understanding some nuanced differences of how effective carrots and sticks are in the three countries. The first difference can be observed under the Aid condition. Participants in India talked mostly about the necessity and benefit of economic relief. This may be because India receives the most amount of economic assistance<sup>12</sup> of the three countries from the United States in actuality. On the other hand, some participants in China seemed offended by the notion that their country would need economic assistance from the United States. A future replication of this study could perhaps measure the effect of carrots as measured by investment partnerships instead of economic aid to avoid offending target state respondents that may bias their responses. And in the case of Korea, more respondents cited humanitarian concerns and needing to follow international law than economic reasons. However, I find this interesting as the effect of Aid is clear in Korea—it could be that social desirability affected the open-ended responses.

Second, one major difference between Korea (ally) and the other two countries (adversary, neutral) was the fact that many Koreans cited the need to maintain good diplomatic relations with the United States, as well as the importance of the KORUS alliance. This type of acknowledgement can be found throughout the four conditions

---

<sup>12</sup> This does not include the economic costs associated with the security guarantee provided to Korea.

and across all levels of support and opposition. In addition to those who opposed the Korean government's decision, those who could not decide, as well as many of those who supported keeping cluster munitions for security reasons acknowledged the importance of the alliance and maintaining good relations with the U.S. In stark contrast, the word diplomacy (or any variation of that) was *never* mentioned by respondents in China or India. A follow-up study could examine the extent to which alliances affect decision-making beyond discourse.

### **3.3 Conclusion**

Using three survey experiments conducted in China, India, and South Korea, this chapter studied the effectiveness and relative efficacy of carrot and stick-type foreign policies. My findings suggest that carrots and stick-type policies are not only different, but also that carrots work better than sticks from the sender state's perspective. I find that respondents are more likely to support their own government acquiescing to the sender state's demands to change the status quo in exchange for carrots rather than sticks. Stick-type policies seemed to provoke nationalistic sentiments, prompting participants to rally around the flag and support their own government, even in some cases where they did not identify with the current majority-ruling party. Conversely, when treated with carrot-type policies, respondents demonstrated a more transactional



understanding of the situation. However, I find that not all carrots are equal: Further disaggregating carrots and sticks reveal that straightforward Aid, rather than Lift Sanction, is mostly driving the results. These findings suggest that new and direct types of carrots (Aid) may elicit more support for concessions than indirect carrots that remove an existing stick (Lift Sanction).

## 4. Experimental Microfoundations of Positive Inducements and Sanctions II: Further Evidence from India

The Chapter 3 experimental results from China, India, and South Korea offer insight into how carrots and sticks as foreign policy are perceived at the individual-level and how that perception shapes their level of support for their own government's response. However, it is important to recognize the role of emotion in individual decision-making (MacKuen et al. 2010; Brader 2005; Brader and Marcus 2013; Mutz 2007; Jervis 1989; Houghton 2014; Johnston, Lavine, and Woodson 2015). For example, the experiments from Chapter 3 implied that 1) the respondents were sensitive to the identity of the sender state (U.S.) making demands ; 2) aligned party identification with the current administration is important in determining their continued support for their own government; and 3) social-desirability bias may exist, as demonstrated by some of the open-ended responses (Parry and Crossley 1950; Locander, Sudman, and Bradburn 1976; Krumpal 2013; Stone et al. 1999; Stocké and Hunkler 2007). Thus, I ran a supplemental experiment<sup>13</sup> to test if emotion was driving the results I found in Chapter 3. Specifically, I wanted to examine whether these findings hold when stripped of

---

<sup>13</sup> This research was reviewed by the Duke University Campus Institutional Review Board (Protocol #: 2020-0230).

political context that might incite nationalism and any other affective responses triggered by humanitarian concerns: Do carrots work better than sticks when potentially triggering political factors are not present?

By drawing upon the theoretical framework developed in Chapter 2 and creating four conditions similar to the four treatments in Chapter 3 without any political context, this chapter contributes to our understanding of how the presence-absence framework developed in Chapter 2 affects actual expected utility calculation at the most basic level. Utilizing another original experiment run in India, I provide empirical evidence that individuals can be induced to change the status quo under direct carrot conditions, consistent with my findings from Chapter 3. This chapter's study uses a within-subject, repeated-measures design to reduce errors due to individual differences. Unlike the between-subjects study in Chapter 3, participants from this chapter's study were shown all four treatments, thereby serving as their own baseline between treatments.

## ***4.1 Research Design***

Using Amazon Mechanical Turk (MTurk), I recruited 1300 India-based adults aged 18 years and older to participate in an approximately 10-minute survey between May 28 to June 23, 2020. While MTurk is not representative of the general public, the sample is more diverse than a college student sample (Berinsky, Huber, and Lenz 2012;

Clifford, Jewell, and Waggoner 2015; Buhrmester, Kwang, and Gosling 2016), has become a common source for political science survey respondents in India (Ausderan 2014; Charnysh, Lucas, and Singh 2015; Clifford, Jewell, and Waggoner 2015; Dietrich and Winters 2015), and demonstrated that high-quality survey data can be acquired among India-based participants when appropriate pay rate is provided and task-specific quality assurance procedures are utilized (Litman, Robinson, and Rosenzweig 2015). The data collection took longer than expected given that MTurk is usually known for its speedy and cost-effective recruitment of subjects in the United States. However, studies have found MTurk to take a much longer period to collect the same sample size in other countries, like India. For example, Boas et al. found that the India MTurk sample (N=1,000) was the slowest to come, stretching over more than six weeks when compared to other platforms such as Facebook, Qualtrics, and MTurk, each run in both the U.S. and India (Boas, Christenson, and Glick 2020).

To create a cross-comparable environment of the two studies in Chapter 3 and 4, I fielded the experiment in India, where the results from Chapter 3 experiment were most strong and in the direction that I expected. Additionally, recruiting a foreign sample that large (N=1300) on MTurk was viable only in India of the three countries from the previous study. The final analytical sample was cut from 1300 to 1191 for the

responses that came from the same IP address, as well as duplicate latitude and longitude coordinates (Ryan 2018), or for speeding through the survey.<sup>14</sup>

After collecting the respondents' own subjective measure of interest and knowledge level of politics and foreign policy, as well as asking a battery of political knowledge questions, participants were guided through the experimental portion as described in detail below, before concluding by collecting their demographic information.

In order to test the relative efficacy of carrots vs. sticks, this experiment was presented in a game form consisting of hypothetical marbles and tokens, instead of framing the experiment and the questions that followed within the context of international relations, or even politics generally. While it is common practice to simplify the issue in question to balls, tokens, or marbles in political science laboratory experimental settings (Battaglini, Morton, and Palfrey 2009; Hamman, Weber, and Woon 2011; Woon 2012; Andrews, Delton, and Kline 2021), some critics may still question the external validity of the experimental results. Psychologists Kühberger et al. (2002) argue that studying decision making under hypothetical situations with hypothetical payoffs is admissible largely because "the essence of decision making lies in the mental manipulation of hypothetical contents" (Kühberger, Schulte-Mecklenbeck, and Perner

---

<sup>14</sup> I defined speeding as spending less than 2 minutes on the survey (Madson and Hillygus 2020).

2002). They note gambling as an example to demonstrate that when people go through the mental exercise of various outcomes based on different choices, all of the outcomes are hypothetical before they make a decision. Therefore, they argue, it is reasonable to assume that real decisions can be studied through hypothetical decisions of the same nature. In short, “the core process of real decision making consists of imagining and evaluating hypothetical options, and [...] this core process is the same for hypothetical decisions” (Kühberger, Schulte-Mecklenbeck, and Perner 2002).

Relatedly, some critics may point out that this experiment did not offer additional monetary incentives for how respondents answered each question. Indeed, some studies have found that real monetary rewards are stronger incentives than hypothetical rewards in decision experiments (V. L. Smith and Walker 1993; Camerer and Hogarth 1999; Hertwig and Ortmann 2001). However, a more recent study—consisting of behavioral and neuroimaging sessions—by neuroscientists Bickel et al. (2009) finds that real and hypothetical monetary outcomes “not only produce comparable behavioral outcomes, but also comparable neural correlates” (Bickel et al. 2009). Similarly, psychologists Locey et al. (2011) found that the type of reward (real or hypothetical) made no significant difference in participant behavior in two different experimental settings, leading them to conclude that “results of experiments with hypothetical rewards validly apply in everyday life” (Locey, Jones, and Rachlin 2011).

### 4.1.1 The Experiment

The experiment itself consisted of four sections, similar to the treatment conditions of the survey experiment from Chapter 3: Carrot, Stick, Lifting of Stick, and Lifting of Carrot.<sup>15</sup> Prior to each section, participants were shown a preamble, describing the situation in which they would be making a decision to either give up or keep their marble in possession at the end of each round. The experiment was designed in a way that a participant choosing to give up their marble in possession can be considered similar to that of a participant giving up their status quo policy.

To set the stage, every participant was first shown the following preamble, as to prime them to think in an environment of the presence or absence of positive and negative outcomes using hypothetical marbles (1-4) and tokens:

*In this next section, you will be in possession of a marble and told some amount of tokens you will be gaining or losing. Please read each question carefully as there are four different marbles: Marble 1, Marble 2, Marble 3, and Marble 4. Each marble is worth a different amount and you will be told how many tokens it is worth. Sometimes the value of the marble will be certain, and other times it will not be certain. Then you will be given a choice of keeping or giving up the marble, which will additionally involve different amounts of tokens being exchanged. The payoff for each question will be the sum of any marble you keep that round plus any gain you made minus any loss you incurred.*

---

<sup>15</sup> The two experiments' four conditions align as follows (Chapter 3, Chapter 4): (Carrot, Aid); (Stick, Sanction); (Lift Stick, Lift Sanction); and (Lift Carrot, Cut Aid).

Then, half of the respondents were first shown the Carrot condition then the Stick condition, while the remaining half were first shown the Stick condition, then the Carrot condition. Afterwards, half the participants were again randomly assigned to first the Lift Carrot condition, then the Lift Stick condition, while the remaining half were first shown the reverse: the Lift Stick condition, then the Lift Carrot condition. In short, every respondent was shown all four conditions with differences in which conditions they were shown first as to not bias their responses. Instead of randomizing the order of all four conditions simultaneously, I prioritized randomizing the order of the straightforward Carrot and Stick conditions and then randomizing the order of the Lift Carrot and Lift Stick conditions as these two environments seemed more difficult to understand for respondents based on my pilot survey experiment in January 2020<sup>16</sup>.

The preamble before each section was carefully worded to reflect the condition under which the participant would have to decide to give up and keep their marble in each round. In the Carrot condition, participants were told that a partner (intentionally not specified) wants to exchange the marble for some tokens. In the Stick conditions, participants were told that a partner wants the participant's marble in possession and the only way to retain that marble is to pay the partner 150 tokens. In the Lift Stick

---

<sup>16</sup> My pilot experimental study was run on 300 India-based adults over the age of 18 from January 15-17, 2020 using MTurk.



condition, participants were told that they have had a longer series of interactions with a partner, in which the partner has wanted their marble for a long time. As such, participants had been paying the partner 150 tokens every period in order to keep their marble in possession. And lastly, in the Lift Carrot condition, participants were told that they have had a longer series of *positive* interactions with a partner, during which the partner had been giving the participant 150 tokens every period as a good-will gesture. But starting this period, the partner wants the participant's marble and if the participants choose not to give up their marble to their partner, they will stop receiving the 150 tokens good-will gesture.

After reading the preamble before each section on a separate screen, participants were asked a total of four questions for each section, totaling 16 questions for the entire experiment. Each question had two possible response choices of either "Give up marble" or "Keep marble," with supplementary information (e.g. "Keep marble; Continue to pay 150 tokens") that highlighted what giving up or keeping the marble meant in terms of their expected value based on tokens. The four questions and the binary response choices in each section are essentially the same with the only difference being which number marble the participant was in possession of for that round. In each question, the participant was told to be in possession of a different marble at a time, with varying values. Across all four conditions, I randomized the question order of questions 1 through 3 (when Marble 1 = 100 tokens, Marble 2 = 150 tokens, and Marble 3 = 200

tokens) and always asked question 4 (when Marble 4 is worth between 0 and 300 tokens) last, as this question measures the respondent's risk propensity.

#### **4.1.1.1 Carrot**

In the Carrot condition, the response choices are "Give up marble; Get 150 tokens" and "Keep marble; No exchange." By exchanging their marble with the partner as a quid pro quo, the participant is able to secure, and "get," a positive outcome. Keeping this marble in possession without an exchange would be the status quo.

#### **4.1.1.2 Stick**

In the Stick condition, the response choices are "Give up marble; Pay nothing" and "Keep marble; Pay 150 tokens." The word "pay" signifies a negative outcome. Paying nothing to a partner by giving up the marble would be the status quo.

#### **4.1.1.3 Lift Stick**

In the Lift Stick condition, the response choices are "Give up marble; Stop paying 150 tokens" and "Keep marble; Continue to pay 150 tokens." The preamble makes clear that the participant had been paying a partner 150 tokens every round in order to keep their marble. By giving up their marble, participants can "stop paying," which signals an absence of a negative outcome while continuing to pay would be the status quo.

#### 4.1.1.4 Lift Carrot

Lastly, in the Lift Carrot condition, the response choices are “Give up marble; Keep receiving 150 tokens” and “Keep marble; Do not receive 150 tokens.” In this condition, the preamble makes clear that the participant had been receiving 150 tokens every round as a good-will gesture. Thus, choosing to keep their marble and stop receiving 150 tokens signifies an absence of a positive outcome. Continuing to receive 150 tokens would be the status quo.

The text of the conditions and questions are as follows.

- Preamble I (Carrot).** In this subsection, a partner wants to exchange your marble for some of their tokens.
1. You are in possession of Marble 1, which is worth 100 tokens. Your partner wants to exchange your marble for 150 tokens. Choose one:
    - a. Give up marble; Get 150 tokens
    - b. Keep marble; No exchange
  2. You are in possession of Marble 2, which is worth 150 tokens. Your partner wants to exchange your marble for 150 tokens. Choose one:
    - a. Give up marble; Get 150 tokens
    - b. Keep marble; No exchange
  3. You are in possession of Marble 3, which is worth 200 tokens. Your partner wants to exchange your marble for 150 tokens. Choose one:
    - a. Give up marble; Get 150 tokens
    - b. Keep marble; No exchange
  4. You are in possession of Marble 4, which is worth between 0 and 300 tokens. Your partner wants to exchange your marble for 150 tokens. Choose one:
    - a. Give up marble; Get 150 tokens
    - b. Keep marble; No exchange

Figure 6: Preamble and Questions (Carrot)

**Preamble II (Stick).** In this subsection, a partner wants your marble. You will need to pay your partner 150 tokens in order to keep your marble.

1. You are in possession of Marble 1, which is worth 100 tokens. You must pay 150 tokens to keep your marble or you can choose to give up your marble. Choose one:
  - a. Give up marble; Pay nothing
  - b. Keep marble; Pay 150 tokens
2. You are in possession of Marble 2, which is worth 150 tokens. You must pay 150 tokens to keep your marble or you can choose to give up your marble. Choose one:
  - a. Give up marble; Pay nothing
  - b. Keep marble; Pay 150 tokens
3. You are in possession of Marble 3, which is worth 200 tokens. You must pay 150 tokens to keep your marble or you can choose to give up your marble. Choose one:
  - a. Give up marble; Pay nothing
  - b. Keep marble; Pay 150 tokens
4. You are in possession of Marble 4, which is worth between 0 and 300 tokens. You must pay 150 tokens to keep your marble or you can choose to give up your marble. Choose one:
  - a. Give up marble; Pay nothing
  - b. Keep marble; Pay 150 tokens

Figure 7: Preamble and Questions (Stick)

**Preamble III (Lifting of Stick).** In this subsection, you and a partner have had a longer series of interactions, in which your partner has wanted your marble for a long time. You have been paying your partner 150 tokens every period in order to keep your marble.

1. You are in possession of Marble 1, which is worth 100 tokens. You have been paying 150 tokens each period to keep your marble. Choose one:
  - a. Give up marble; Stop paying 150 tokens
  - b. Keep marble; Continue to pay 150 tokens
2. You are in possession of Marble 2, which is worth 150 tokens. You have been paying 150 tokens each period to keep your marble. Choose one:
  - a. Give up marble; Stop paying 150 tokens
  - b. Keep marble; Continue to pay 150 tokens
3. You are in possession of Marble 3, which is worth 200 tokens. You have been paying 150 tokens each period to keep your marble. Choose one:
  - a. Give up marble; Stop paying 150 tokens
  - b. Keep marble; Continue to pay 150 tokens
4. You are in possession of Marble 4, which is worth between 0 and 300 tokens. You have been paying 150 tokens each period to keep your marble. Choose one:
  - a. Give up marble; Stop paying 150 tokens
  - b. Keep marble; Continue to pay 150 tokens

Figure 8: Preamble and Questions (Lift Stick)

- Preamble IV (Lifting of Carrot).** In this subsection, you and a partner have had a longer series of positive interactions, in which your partner has been giving you 150 tokens every period as a good-will gesture. But starting this period, your partner wants your marble. If you choose to keep your marble, you will stop receiving the 150 tokens good-will gesture.
5. You are in possession of Marble 1, which is worth 100 tokens. You had been receiving 150 tokens every period as a good-will gesture from a partner. But starting this period, your partner wants your marble. If you choose to keep your marble, you will stop receiving the 150 tokens good-will gesture. Choose one:
    - a. Give up marble; Keep receiving 150 tokens
    - b. Keep marble; Do not receive 150 tokens
  6. You are in possession of Marble 2, which is worth 150 tokens. You had been receiving 150 tokens every period as a good-will gesture from a partner. But starting this period, your partner wants your marble. If you choose to keep your marble, you will stop receiving the 150 tokens good-will gesture. Choose one:
    - a. Give up marble; Keep receiving 150 tokens
    - b. Keep marble; Do not receive 150 tokens
  7. You are in possession of Marble 3, which is worth 200 tokens. You had been receiving 150 tokens every period as a good-will gesture from a partner. But starting this period, your partner wants your marble. If you choose to keep your marble, you will stop receiving the 150 tokens good-will gesture. Choose one:
    - a. Give up marble; Keep receiving 150 tokens
    - b. Keep marble; Do not receive 150 tokens
  8. You are in possession of Marble 4, which is worth between 0 and 300 tokens. You had been receiving 150 tokens every period as a good-will gesture from a partner. But starting this period, your partner wants your marble. If you choose to keep your marble, you will stop receiving the 150 tokens good-will gesture. Choose one:
    - a. Give up marble; Keep receiving 150 tokens
    - b. Keep marble; Do not receive 150 tokens

Figure 9: Preamble and Questions (Lift Carrot)

## **4.2 Expectations**

### **4.2.1 Marble 1 = 100 & Marble 3 = 200**

As the figures show, the value of each marble and the question that follows are set in a way that there are mathematically correct answers when the participant is in possession of Marble 1 (worth 100 tokens) and Marble 3 (worth 200 tokens) across all

four conditions. When in possession of Marble 1, regardless of the condition (e.g. Carrot vs. Lift Carrot), the question is framed in a way that it is more beneficial to give up the marble. Similarly, when in possession of Marble 3, the mathematically correct answer would be to choose to keep the marble in possession. Given that participants were not offered extra monetary incentives based on correct answers, measuring how well participants objectively did when in possession of M1 and M3 gave me more confidence that they understood each round's preamble and were not speeding through the questions.

**Table 7: Expectations for M1 and M3**

	<b>Give Up</b>	<b>Keep</b>
<b>Marble 1= 100</b>	✓	
<b>Marble 3 = 200</b>		✓

#### **4.2.2 Marble 2 = 150**

The focus of this experiment is when Marble 2 is worth 150 tokens. When participants are in possession of Marble 2, the payoffs of the two choices are such that giving up the marble and keeping marble are equal, regardless of the condition. When the payoffs are equal, dominant work in decision-making—namely, loss aversion

(Kahneman and Tversky 1979), Endowment Effect (Thaler 1980; Kahneman, Knetsch, and Thaler 1990; 1991), and Status Quo Bias (Samuelson and Zeckhauser 1988)—all would expect the participant to keep their marble. But based on my Chapter 3 findings, I expect the opposite: When comparing the environments of Carrots and Sticks, participants under the Carrot (presence of positive outcome) and Lift Stick (absence of negative outcome) conditions can be induced to give up their marble even if the payoff is exactly equal to that of keeping the marble and retaining the status quo. Similarly, I expect the reverse to be true: Under the Stick (presence of negative outcome) and Lift Carrot (absence of positive outcome) conditions, participants are more likely to keep their marble for the future, even if the mathematical payoffs are equal.

**Table 8: Expectations for M2**

	<b>Give Up</b>	<b>Keep</b>
<b>Carrot, Lift Stick</b>	✓	
<b>Stick, Lift Carrot</b>		✓

#### **4.2.3 0 < Marble 4 < 300**

Marble 4 does not have a defined value, but rather is given a range of having a value between 0 and 300 tokens. When the participants are in possession of Marble 4, the question is framed in a way such that the participants have an equal chance of correctly

guessing and choosing to either keep or give up that marble. This case is different from when Marble 2 is worth 150 tokens, in which the expected utility of each action is known. As such, the uncertainty in the payoff makes Marble 4 unique when compared to the other three marbles and it is designed to measure the participants' risk propensity given that the probabilities of ending up with a net negative or net positive payoff are equal.



### 4.3 Results

The results of the binary choice the participants made are shown in crosstabs for convenience below.

**Table 9: Crosstab of Responses (Carrot)**

	<b>Give Up</b>	<b>Keep</b>
<b>M = 100</b>	889 (74.8%)	300 (25.2%)
<b>M = 150</b>	721 (60.6%)	468 (39.4%)
<b>M = 200</b>	431 (36.2%)	758 (63.8%)
<b>0 &lt; M &lt; 300</b>	543 (45.7%)	646 (54.3%)

**Table 10: Crosstab of Responses (Stick)**

	<b>Give Up</b>	<b>Keep</b>
<b>M = 100</b>	758 (63.8%)	431 (36.2%)
<b>M = 150</b>	547 (46.0%)	642 (54.0%)
<b>M = 200</b>	343 (28.8%)	846 (71.2%)
<b>0 &lt; M &lt; 300</b>	430 (36.2%)	759 (63.8%)

**Table 11: Crosstab of Responses (Lift Stick)**

	<b>Give Up</b>	<b>Keep</b>
<b>M = 100</b>	762 (64.1%)	427 (35.9%)
<b>M = 150</b>	651 (54.8%)	538 (45.2%)
<b>M = 200</b>	461 (38.8%)	728 (61.2%)
<b>0 &lt; M &lt; 300</b>	517 (43.5%)	672 (56.5%)

**Table 12: Crosstab of Responses (Lift Carrot)**

	<b>Give Up</b>	<b>Keep</b>
<b>M = 100</b>	738 (62.1%)	451 (37.9%)
<b>M = 150</b>	686 (57.7%)	503 (42.3%)
<b>M = 200</b>	517 (43.5%)	672 (56.5%)
<b>0 &lt; M &lt; 300</b>	593 (49.9%)	596 (50.1%)

### 4.3.1 Marble 1 = 100 & Marble 3 = 200

As expected, the majority of participants chose to give up their marble when it was mathematically correct to do so (M1 = 100 tokens) and the majority of participants also correctly chose to keep their marble when it was appropriate to do so (M3 = 200 tokens) across all conditions except Lift Carrot. Under the Lift Carrot condition, while the majority of participants (62.1%) correctly chose to give up when M1 = 100, more also chose to incorrectly give up their marble when M3= 200 (50.5%).

**Table 13: Summary of Expectations and Results (M1, M3)**

	Expectation		Result	
	Give Up	Keep	Give Up	Keep
M1 = 100	✓		✓	
M3 = 200		✓		✓ (Except Lift Carrot)

There were two questions with correct answers in each of the four conditions and the number of correct answers each participant could score ranged from 0 to 8. While the majority (59.63%) of participants did get 5 or more answers right out of the 8, it was surprising that less than 8% of the participants got all eight correct, given the repetitive

nature of the type of questions and how well the majority of the participants answered political knowledge questions.

Prior to the experiment, participants were asked four political knowledge questions in all multiple-choice format in which approximately 78% of the participants answered all four questions correctly, and 96% of them got at least three correct. The results are summarized in Table 14 and Table 15 below.

**Table 14: Number Correct (Give Up/Keep)**

0	1	2	3	4	5	6	7	8
2 (.00)	11 (.01)	51 (.04)	109 (.09)	307 (.26)	212 (.18)	233 (.20)	171 (.14)	93 (.08)

**Table 15: Number Correct (Political Knowledge)**

0	1	2	3	4
3 (.00)	9 (.01)	34 (.03)	214 (.18)	926 (.78)

#### **4.3.2 Marble 2 = 150**

To reiterate, when the value of the marble equals 150 tokens, the expected values of both giving up the marble and keeping the marble are equal. As such, when the marble is worth 150 tokens, participants should mathematically be indifferent to giving

up or keeping the marble in possession. I find that the majority of participants choose to give up their marble in hand in all but the Stick condition (46.0%), with the largest number of participants choosing to give up under the Carrot condition (60.6%). Even when stripped of all political context, participants were more likely to choose to keep their marble in the presence of a negative outcome (Stick), even though the mathematical payoff is identical for the two choices. Similarly, participants were more likely to choose to give up their marble in the presence of a positive outcome (Carrot). In the two removal conditions (absence of positive and negative outcomes), the distinction is not present. These results are consistent with the results from Chapter 3: 1) participants are more likely to give up their marble (give up the status quo policy) when the preamble is phrased to induce; 2) participants are more likely to keep their marble (hold on to the status quo) when the preamble is phrased as a stick; and 3) the results in the indirect domains are less clear (Lift Carrot, Remove Aid; Lift Stick, Lift Sanctions).

**Table 16: Crosstab of Responses (M = 150)**

	<b>Give Up</b>	<b>Keep</b>
<b>Carrot</b>	721 (60.6%)	468 (39.4%)
<b>Stick</b>	547 (46.0%)	642 (54.0%)
<b>Lift Stick</b>	651 (54.8%)	538 (45.2%)
<b>Lift Carrot</b>	686 (57.7%)	503 (42.3%)

### 4.3.3 0 < Marble 4 < 300

When the marble's value is unspecified but the range is set such that there is an equal likelihood of making a mathematically correct or wrong choice, I find that participants generally tend to be risk-averse across all four conditions, but especially so under the direct Stick condition.

**Table 17: Crosstab of Responses (100 < M < 300)**

	Give Up	Keep
Carrot	543 (45.7%)	646 (54.3%)
Stick	430 (36.2%)	759 (63.8%)
Lift Stick	517 (43.5%)	672 (56.5%)
Lift Carrot	593 (49.9%)	596 (50.1%)

### 4.3.4 McNemar's Tests (M = 150)

Because I used a within-subject, repeated measures design that relied on first randomizing the Carrot or Stick conditions, then randomizing the Lift Carrot and Lift Stick conditions, I use McNemar's tests to assess the relative efficacy of carrots and sticks as paired dichotomous data.

**Table 18: McNemar Carrot vs. Stick ( $p < .01$ )**

	Keep (Stick)	Give Up (Stick)
Keep (Carrot)	271	197
Give Up (Carrot)	371	350

When comparing the direct Carrot (presence of positive outcome) and direct Stick (presence of negative outcome) conditions, we can see from Table 18 that 371 respondents chose to give up their marble in possession when induced, but chose to keep their marble when presented with the Stick condition. Conversely, only 197 participants gave up the status quo under the Stick condition while choosing to keep the marble in the Carrot condition. I find statistical support at .01 level ( $p = 3.902e-13$ ) that not only are carrots and sticks different, but carrots are more effective at getting people to give up the status quo. When comparing indirect carrots and sticks under the absence domains, however, I do not find any statistical difference ( $p = .122$ ) between the two conditions (Lift Carrot, Lift Stick). These results are consistent with my Chapter 3 findings.

**Table 19: McNemar Lift Carrot vs. Lift Stick ( $p > .1$ )**

	Keep (Lift Stick)	Give Up (Lift Stick)
Keep (Lift Carrot)	279	224
Give Up (Lift Carrot)	259	427

## **4.4 Conclusion**

In this chapter, I took another look at individual-level microfoundations of carrots and sticks, presenting the results from an online experiment run in India, stripped of any political context so as to test whether emotions were driving the results from the previous chapter. This experiment, like the survey experiment presented in Chapter 3, manipulated the conditions of carrots and sticks under which participants were asked to choose between giving up or keeping something already in their possession. I find that even when stripped of any political context that may trigger certain emotions that may bias their responses, my results are consistent with that of an experiment riddled with political cues: Individuals are more likely to give up what they already have and change the status quo (e.g. a policy or change behavior as the sender states wishes) under the direct carrot condition while less likely to do so under the direct stick condition. Similar to the findings from Chapter 3, while the relative effect of straightforward carrots vs. sticks is clear, this is not the case in the removal of both tools (Lift Stick, Lift Carrot).

## **5. Inducements and Sanctions in Practice: A Case Study of North Korea.**

The previous two chapters take an important step in understanding the microfoundational logic of inducements and sanctions in international politics. However, these results are at the individual-level and found under carefully planned experimental settings. Thus, in this chapter, I examine how inducements and sanctions have played out in practice at the state-level. I specifically focus on the 1994 Agreed Framework and key agreements that resulted from the Six Party Talks (2003-2009), while giving the background context from a South Korean perspective.

Examining the North Korean case is helpful in further understanding the utility and relative efficacy of inducements and sanctions in two main ways that the experimental chapters could not contribute to as much. The first has to do with the problem of carrots that was alluded to by some of the open-ended responses in Chapter 3: opportunistic and insincere target states. In both Chapters 3 and 4, I find that direct carrots work better than sticks. Upon closer examination in Chapter 3, I found that some respondents were okay with their own country heeding to U.S. demands as the policy change was completely reversible once the carrot was received. For example, several respondents mentioned that because their country has the know-how to make cluster munitions, getting rid of the current stockpile was not too consequential especially if economic aid would be given in return. In other words, the respondents did believe that



the status quo change was a *true* status quo change. This implies that sender states known for using carrots can become vulnerable to extortion. This is what is observed in the case of North Korea and policymakers have adapted their carrot allocation strategies to include monitoring and verifying complete and irreversible changes made by the target state. Second, while I found participants to have a harder time understanding the absence conditions (of both positive and negative outcomes) in the experiments, interviews with current and former government officials in this chapter reveal that policymakers have a more nuanced understanding of the two different types of carrots and two different types of sticks as presented in my framework. The reluctance to use a carrot by removing an existing stick implies that signals matter (e.g. removing an existing stick for offense A implies that A was reversed), for at least the sender state.

This chapter is based upon archival work of primary and secondary sources at the National Archives in the Busan, Daejeon, and Seongnam branches of South Korea (April-May 2021), interviews<sup>17</sup> with a range of six current and former government officials (June 2021), scholars (November 2020-June 2021), as well as existing relevant sources on the topic, all in both Korean and English. In most cases of current and former

---

<sup>17</sup> This research was reviewed by the Duke University Campus Institutional Review Board (Protocol #: 2021-0415).

government officials, interviewees requested anonymity. Those individuals are identified in letters (e.g. "A").

## **5.1 The Case for North Korea**

While the issue is still ongoing and critics would consider North Korea as a failed case of both inducements and sanctions, North Korea is an ideal case to evaluate the utility and relative efficacy of positive inducements and sanctions for several reasons outlined below.

### **5.1.1 Variation in Carrots and Sticks**

I have conceptualized economic carrots and sticks as four distinct tools: inducement (aid), sanction, lifting of sanction, and cutting aid. The North Korean case has an abundance of each of these four tools spanning decades of utilization in practice.

Going beyond what I have been able to test through my experimental work, the North Korean case has at least two other important variations to note. First, a wide variety of types of carrots and sticks can be found. Indeed, there exists many different types of positive inducements including, but not limited to, security guarantees, medical aid, weapons, as well as diplomatic and cultural inducements. For the purpose of my dissertation, however, I had narrowed my focus of positive inducements to that of

economic inducements, with an even more narrow focus on foreign aid. The most frequently used or requested types of inducements in the North Korean case are economic aid, food aid, energy aid, normalization of diplomatic relations, and security guarantees in the form of a non-aggression pact. Second, while my experimental studies had fixed the sender state as the party who initiates the offer of carrots, the North Korean case also includes cases in which the target state initiates the request of carrots as well.

### **5.1.2 Variation in Sender States and Strategies**

The North Korean case has two further important variations that extend beyond what I was able to manipulate in my experiments. First, there is variation in the number and type of sender states. The 1994 Agreed Framework was a bilateral agreement between the United States and North Korea while the Six Party Talks include five total sender states: China (host), Japan, Republic of Korea (ROK), Russia, and the United States. At times, these actors were a singular sender state and also part of different combinations of a coalition of sender states. As well, there is variation in the sender state: China and Russia are allied sender states while Japan, ROK, and the U.S. are adversarial sender states.

Second, both allies and adversaries engaged in a mixed strategy of using both carrots and sticks. For example, China – an important DPRK ally--signed on to the 2006 United Nations Security Council resolutions condemning and sanctioning North Korea (UNSCR 1695 and UNSCR 1718), as well as increasing the level of trade with North Korea to historic highs with the start of the Six Party Talks (shown in figure below).

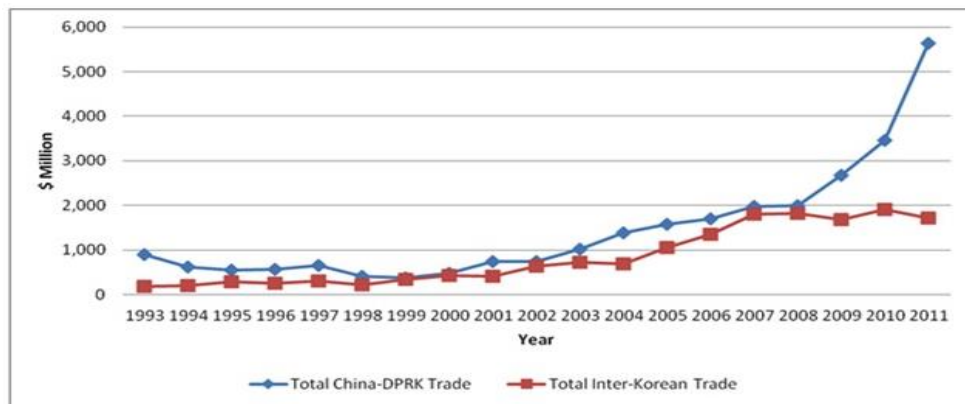


Figure 10<sup>18</sup>: China-DPRK Trade vs. Inter-Korean Trade (1993-2011)

### 5.1.3 Nobel Peace Prize for Inducement-Policy

Lastly, South Korean President Kim Dae-jung (commonly referred to as DJ in South Korea) was awarded the Nobel Peace Prize for his landmark Sunshine Policy

---

<sup>18</sup> (Snyder 2012)

towards the North. The policy's central focus is on positive inducements and engagement.

## ***5.2 Pre-Sunshine Policy and the 1994 Agreed Framework***

The 1994 Agreed Framework between the United States and North Korea was a result of a nuclear crisis beginning in January 1994. After the CIA publicly estimated that North Korea had enough plutonium for one or two nuclear weapons in January and the IAEA confirmed that North Korea was removing spent fuel rods from its Yongbyun reactor without international inspectors present, the DPRK declared that it would cut off all ties with the IAEA, implying that it would pursue nuclear weapons, despite being a signatory of the Nonproliferation Treaty (NPT). For U.S. President Jimmy Carter's trip to Pyongyang to meet with Kim Il-sung and the subsequent Agreed Framework avoided a military escalation. The key conditions of the agreed framework and if and when they were implemented are summarized below.

**Table 20: Key Conditions of the Agreed Framework<sup>19</sup>**

<b>Agreed Framework Condition</b>	<b>Implementation and Discussion</b>
The United States agrees to provide two light-water reactor (LWR) power plants by the year 2003 (article 1.2)	Four years behind schedule. No delay in South Korean or Japanese provision of funds. The delay has been U.S. implementation and construction
The United States agrees to provide formal assurance to the DPRK against the threat or use of nuclear weapons by the United States (article 2.3.1)	No. The United States maintains that military force is an option on the peninsula. The United States continues to target North Korea with nuclear weapons via the "Nuclear Posture Review"
The DPRK agrees to freeze its nuclear reactors and to dismantle them when the LWR project is completed (article 1.3)	Until December 2002
The DPRK agrees to allow the International Atomic Energy Agency to monitor the freeze and full cooperation (article 1.3)	Until December 2002
The United States and the DPRK agree to work toward full normalization of political and economic relations, reducing barriers of trade and investment, etc. (article 2.1)	Limited lowering of U.S. restricts on trade, no other progress toward normalization or peace treaty. The United States continues to list North Korea as a terrorist state
The United States and the DPRK will each open a liaison office in each other's capital, aiming at upgrading bilateral relations to the ambassadorial level (articles 2.2, 2.3)	No

<sup>19</sup> (V. D. Cha and Kang 2004)

The agreement is significant in understanding the trajectory of the North Korean case as it set a precedent of utilizing mostly conditional carrots, in a true quid pro quo fashion. The agreement essentially offered economic benefits, political normalization, and energy assistance in exchange for freezing the North's nuclear program for a month and eventually dismantling it.

The Agreed Framework formally ended in 2002 when North Korea announced that it would leave the NPT, in part, in retaliation to President George W. Bush labeling North Korea as part of an axis of evil in her January 2002 State of the Union Address. This is in direct contrast to the studies that find "naming and shaming" to be effective (Kelley 2017; Koliev 2018; Krain 2012; DeMeritt 2012).

### ***5.3 Sunshine Policy Years (1998-2008)***

South Korea's Sunshine Policy toward the DPRK lasted through two liberal administrations, during the governments of DJ and Roh Moo-hyun (RMH). President Kim's Sunshine Policy earned its name from the famous Aesop's fable of the North Wind and the Sun.<sup>20</sup> The fable's message of inducing over coercing was the metaphor

---

<sup>20</sup> The Sun and Wind were debating which was more powerful and decided to test by competing against each other in getting a man to take off his coat. The Wind went first and blew cold, harsh winds on the man, but this caused the man to cling to his coat even harder. When the Sun shone light and warmth (heat) next, the man took off his coat and relaxed.

used by the Kim administration to describe the new chapter of inter-Korean relations. And true to its form, North Korea benefited from approximately \$3 billion from the South during this short decade, surpassing the amount it is estimated to have received from China in the same period.<sup>21</sup> During DJ's presidency, the South achieved three symbolically monumental elements of progress with North Korea: 1) the June 2000 summit between DJ and Kim Jong-il in Pyongyang;<sup>22</sup> 2) starting the Kaesong Industrial Complex; and 3) starting the Hyundai Keumgang Mountain tourism project. Keumgang Mountain, known for its beautiful scenery, became a special administrative region in North Korea to allow visitors. The hope was to get the South Korean public to feel more connected to the North in preparation for an eventual reunification while the North benefited from an inflow of extra foreign currency. Financially, however, it was a losing game for the South, costing Hyundai around \$1.5 billion in investment and the ROK government \$76 million in aid alone.<sup>23</sup> DJ's successor, President Roh, effectively continued the Sunshine Policy through the entirety of his term (2003-2008), just under the name "Peace and Prosperity Policy." Two key events marked RMH's term in relation to North Korea: 1) DPRK's first nuclear test in 2006 and 2) the October 2007 summit and Declaration in Pyongyang.

---

<sup>21</sup> Chosun Ilbo (2010)

<sup>22</sup> This was significant as it was the first-ever South-North Korean summit held.

<sup>23</sup> (Nanto and Manyin 2010)



The Sunshine Policy became very politicized and controversial any time the North made provocations, obviously including the 2006 nuclear test. Yet, both the Kim and Roh administrations continued with their engagement policies. The reasoning behind their actions were two-fold. First, DJ and RMH (and consequently current President Moon Jae-in) did not view North Korea's nuclear program as a threat.<sup>24</sup> They were of the conviction that Pyongyang developed nuclear capabilities as a deterrent to U.S. hostile policies and would not be using them against their own brothers and sisters in South Korea. RMH instead feared the consequences of a failed policy of coercion far more.<sup>25</sup> Because the two Presidents did not feel as threatened by the DPRK nuclear program, they were able to continue pursuing better inter-Korean relations at the expense of some carrots. Further, given that this period of active engagement with the North was a stark difference from previous decades, both leaders wanted a normalization of relations with South's northern neighbor as part of their legacy. Second,<sup>26</sup> the Sunshine Policy (and effectively the Peace and Prosperity Policy) was envisioned as a transformational policy, turning a new chapter of inter-Korean relations.

---

<sup>24</sup> Conversation with Chun Yungwoo, a former ROK career diplomat of 33 years. Served as the Chief ROK negotiator for Six Party Talks (2006-2008), Deputy Minister of Foreign Affairs (2009-2010), and National Security Advisor to President Lee Myung-bak (2010-2013). June 2021, Seoul.

<sup>25</sup> Conversation with C, former Korean government official. March 2021, June 2021, Seoul.

<sup>26</sup> Conversation with Victor Cha, U.S. academic and former U.S. government official who served as former Deputy Head of Delegation for the Six Party Talks. November 2020 and June 2021, Seoul (Zoom).

DJ and RMH believed that the ROK's engagement approach, full of economic and security benefits, would result in changing Pyongyang's behavior completely. They believed that by consistently interacting with North Korea and building up the North's economy and self-perceived sense of security, Pyongyang would slowly open up to the rest of the world, providing economic prosperity. Like in the case of China, and the theory of economic interdependence, they believed that opening up the country's economy would bring meaningful, long-term changes. Specifically, because they believed that the roots of the North Korean problem were insecurity and lack of reform, the nuclear issue would take care of itself once those two problems were addressed. Additionally, DJ and RMH believed that consistent contact with the North would help win the hearts and minds<sup>27</sup> of the people.

So, what went wrong? Cha argues that instead of being a transformational period, the decade became known more for being transactional, full of one-time tit-for-that exchanges (V. Cha 2012). Pyongyang happily engaged with the South as they were able to astronomically benefit without giving much in return. To be clear, this was not the stance of all six parties. One of the major clashing points between President George W. Bush and both President Kim and Roh was in agreeing what type of approach to take

---

<sup>27</sup> Changing hearts and minds has generated a lot of research (Arens 1997; Mockaitis 2003; Peace 2010; Beath, Christia, and Enikolopov 2012; Li and Rønning 2013; Fishstein and Wilder 2012; Tokdemir 2017).

with North Korea. Especially after the breakdown of the 1994 Agreed Framework, Bush did not believe in making concessions to Pyongyang without preconditions. As well, while the United States' strategy was described as CVID: Complete, Verifiable, Irreversible Denuclearization, the ROK's preferred approach was making small progress sequentially. They believed that it was better to move forward with small deals rather than wasting months and years for a huge outcome like a big, comprehensive deal.<sup>28</sup> Though the two allies' preferred approach differed, they shared the ultimate goal of denuclearization of the Korean peninsula (ROK MFA 2003, 2004).

#### ***5.4 Six Party Talks (2003-2009)***

Because the Six Party Talks (SPT)—consisting of six rounds of talks—formally discontinued in 2009, unofficially ending in 2007, and the North Koreans' nuclear capability is at its historic best, many critics would argue that the Talks were a failure. But defenders of the Talks would argue that the Talks made several noteworthy accomplishments. SPT represented the “first multilateral institution since 1945 that dealt with security issues and involved all of the key powers in Northeast Asia” (V. Cha 2012). As well, negotiators made two breakthroughs in achieving tangible success in 2005 and

---

<sup>28</sup> Conversation with Ambassador Chun.

2007. When compared to the 1994 Agreed Framework, SPT managed to get further along in denuclearizing North Korea as SPT resulted in the disablement of critical enrichment parts, a freeze of the Yongbyon program, as well as the ultimate dismantlement of portions of DPRK's nuclear program.

The September 2005 Six Party Joint Statement was especially pathbreaking as it was the first-ever multilateral denuclearization document in Northeast Asia. This agreement was the first time North Korea formally acknowledged the possession of nuclear weapons in writing and pledged to give them up and end all associated nuclear programs.

Similar to the 1994 Agreed Framework, the 2005 agreement was full of concessions: parties agreed that North Korea would receive the light water reactors previously promised to them in 1994; the United States and Japan committed to peacefully coexist with North Korea and work towards normalizing diplomatic relations; North Korea was promised energy assistance as compensation for freezing their nuclear program; and the parties committed to discussing a broader peace mechanism for the peninsula and regional security.

The victorious feelings were short-lived when the Macau bank, Banco Delta Asia (BDA) froze North Korea's accounts, worth about \$25 million, to investigate the money-laundering activities related to the accounts. This investigation had begun by the U.S. Treasury Department and law enforcement agencies issuing an advisory to U.S.

financial institutions to beware doing business with BDA. As the advisory was coincidentally sent four days before the September Joint Statement, North Koreans (and many others) believed that the United States had deliberately taken these actions. This “stick” was a painful and stark departure from previously repeated concessionary acts.<sup>29</sup> In response, North Korea fired seven ballistic missiles as its largest-ever display over missile tests in July 2006. The North Koreans continued their revenge by conducting an underground nuclear test in October 2006. The 2005 breakthrough agreement’s quick rise and fall warrant a closer look at the consequences of a sender state simultaneously mixing strategies (even if it was intentional) of carrots and sticks. To be clear, a simultaneous start of both types of strategies is different from “mixing strategy” due to existing previous policies.

In response, UNSC passed two resolutions (UNSCR 1695 and UNSCR 1718) condemning DPRK and implementing a range of sanctions. These resolutions are particularly noteworthy as they marked the first time that China and Russia (North Korea’s allies) signed the resolutions against the regime.

After experiencing the pain of UNSCR sanctions and the BDA money being withheld for over a year, North Korea and the rest of the Party agreed to resume Talks. And in February 2007, another breakthrough was achieved in which the steps towards

---

<sup>29</sup> Conversation with B, current ROK government official. May 2021, Seoul.

denuclearization were agreed upon. Similar to the 1994 and 2005 breakthroughs, the 2007 agreement offered many tit-for-tat carrots to North Korea (e.g., halting operations at Yongbyon in return for an initial shipment of 50,000 tons of heavy fuel oil).

### ***5.5 Post-SPT Years (2009-)***

Despite the progress made in 2007, talks broke down starting in 2008 and formally ended in 2009. While some observers pointed to Kim Jong-il's stroke in August 2008 as the reason for the breakdown of Talks, the bigger issue for North Koreans was change in South Korean leadership. President Lee Myung-bak (MB) was elected in December 2007, the first conservative government in a decade, and he immediately declared an end of the Sunshine Policy. This hardline approach continued with the conservative Park Geun-hye administration until the current liberal President Moon Jae-in came into office in 2017.

During the Roh administration (2003-2008), Moon twice served as Senior Secretary to the President for Civil Affairs and Senior Secretary to the President for the Civic and Social Agenda once, for a total of 3.5 years, before returning as President Roh's Chief of Staff for a year. This means that he effectively served in the RMH administration for almost 4.5 years of a five-year fixed-term presidency. As such, Moon's approach closely mirrors the Sunshine approach with an even more extreme

exception: While both Presidents Kim and Roh firmly believe in the ultimately goal of North Korea's denuclearization, President Moon believes that peace is achievable with a nuclear North Korea, as long as the U.S. doesn't enact any more hostile policies towards them<sup>30</sup>.

### **5.6 South Korea's Carrots: Success or Failure?**

One might logically question why the South Koreans continue to fritter away free resources to North Korea, with no real tangible gain, despite repeated failures. Indeed, the way ROK approached its use of carrots is flawed in that North Korea had no reason not to accept and agree because there just simply wasn't much required from the North Koreans in return. This strategy of carrots did in fact attract a lot of attention because it seemingly worked well in the beginning of the Sunshine period. But, without any enforcement or verifiable mechanisms in place, let alone any preconditions for accepting the carrot, it increasingly looked like the South was willingly allowing the North to take advantage of them. The answer lies in South Korea's reunification strategy.

---

<sup>30</sup> Interview with D, former ROK government official who served in the Moon administration. June 2021, Seoul.

### 5.6.1 Reunification Strategies and Preferences

There are largely four different way of achieving reunification of the two Koreas: 1) unification by absorption, similar to that of East and West Germany; 2) unification by force; similar to that of North and South Vietnam; 3) unification by consensus, similar to the unsuccessful attempt by Yemen in 1990; and 4) unification by trusteeship, which both Koreas would reject due to their 1945 experience with the Soviet Union and the United States (Bae 2010; Lee and Moon 2020). While South Korea's preferred strategy has changed over the decades of being divided, unification by consensus (3) has become unofficially adopted. By adopting an approach of consensus, ROK leaders have purposefully delayed the enormous financial and logistical task of unification. A "hard landing," or a sudden regime collapse, would force South Koreans to take on the heavy economic and societal burden.<sup>31</sup> And thus, the unofficial, unwritten purpose of the Sunshine Policy and Peace and Prosperity Policy was to avoid this type of a "hard landing" and delay unification for as long as needed, until the South was ready to take on the burdensome task. In short, engaging with North Korea was a part of Seoul's soft-landing strategy.<sup>32</sup> In this light, ROK's "futile" carrots can be rediscovered as *investments*. Seoul invested in a healthier, safer, and more prosperous North Korea, preparing for a

---

<sup>31</sup> Cha, 2020, 2021.

<sup>32</sup> Cha (2012); Moon (2002); Bae (2010)



future reunification. With constant contact and cultural exchanges, the people from the two countries could now assimilate to one another's culture faster. The "wasted" carrots may ultimately prove to be beneficial in the future.

## ***5.7 Implications***

This chapter provided a brief, fragmented, overview of how inducements and sanctions have been utilized in practice by looking at the case of North Korea. Although the next chapter will outline future research steps, it is worth noting some implications of this chapter before concluding.

First, the variation in effectiveness (both real and perceived), as well as the decision to use these tools clearly imply that not all carrots are equal and not all sticks are equal. The fact that North Korea kept asking for a nonaggression pact and a normalization of diplomatic relations from the United States, even though these two things were explicitly always "given" at all three of the major agreements (1994, 2005, 2007) implies the difficulty in delivering a carrot that could easily be removed. For example, certain types of tangible economic assistance (e.g. food aid) cannot be returned and reclaimed once disbursed. The reversibility of different types of carrots and their effects warrant further study.

Similarly, tangible sticks – like sanctions – that spell out what the target state did wrong provide a clear step in order to reverse the stick. However, sticks like naming and shaming (e.g. labeling North Korea as an axis of evil) provoke unnecessary hostile sentiments, even when the purpose is clear (state-sponsored terrorism and pursuing WMDs).

Lastly, and most importantly, a closer look at the efficacy and consequences of mixed strategies is warranted. While sanctions have been long studied by security studies scholars as a negotiating tool or alternative tool to military force, we lack a sophisticated understanding of carrots as policy (beyond “aid for policy” that is mostly used to describe influencing development policies in developing countries).

## 6. Conclusion

In this dissertation, I have sought to bridge the policy-academy gap by translating a perennial policy-level problem of “carrots vs. sticks” to an academic question assessing the utility and relative efficacy of inducements versus sanctions as foreign policy tools. Using a framework of presence and absence of positive and negative outcomes, I specifically examine how U.S. positive inducements (i.e., foreign aid) and sanctions are perceived by the individual people in target states (China, India, and South Korea), and how the microfoundational findings are translated to state behavior within the nuclear domain through a case study of North Korea. This dissertation connects the two often separate literatures of economic carrots (foreign aid) and sticks (sanctions) in international relations by studying the two tools of economic statecraft simultaneously.

Dominant works in psychology (Baumeister et al. 2001) have shown that people are more sensitive to bad outcomes than good outcomes, which would suggest that sanctions should be utilized more in order to achieve preferred outcomes. My findings suggest, however, that inducement policies that require concessions from the target state can be framed to gain the target state’s public support and allow target state leaders to “save face.” In contrast, sanctions provoke nationalism, creating a rally around the flag effect, resulting in negative consequences for the sender state. Using survey experimental methods to study the micro-foundations of inducement and sanction

perceptions, I demonstrate that the United States can successfully induce target state individuals to support changing the status quo. To further examine whether affect is driving these differences, I run a second experimental study in which only simple numbers are presented in terms of marbles and tokens. The results of the second study support my first survey results in that an inducement-like question is more likely to result in subjects giving up the marble they already have, in contrast to loss-aversion theory. Then, I examine how inducements and sanctions have been utilized in practice by looking at the case of North Korea. My findings have important implications for both scholars in the field and policymakers alike: Positive inducements and sanctions need much more simultaneous attention as strategic instruments of foreign policy than they have been given thus far.

This dissertation takes a small but important step in better understanding these widely used tools. As this was the first comprehensive study—to my knowledge—empirically examining these foreign policy tools simultaneously, there is much to be followed-up and supplemented going forward. The wealth of possibilities in building off of my dissertation signals that this topic is important enough to pursue and will contribute to both the academic and policy worlds.

## **6.1 Going Forward and Future Research**

### **6.1.1 Presence vs. Absence of Positive and Negative Outcomes**

While my experimental results demonstrate the difference between straightforward carrots and sticks, the results of removing an existing carrot or stick are less clear. Instead of finding key differences between the domains of gains and losses overall, I found empirical evidence differentiating between those two domains only when framed as a *presence* of positive and negative outcomes. The *absence* of positive and negative outcomes failed to show consistency, even without statistical significance. This might be due to the fact that it was simply more difficult to conceptualize the hypothetical scenarios I presented the participants with, as they required more background information to explain the preexisting carrot and stick compared to the straightforward carrot and stick conditions. From my case study of North Korea, I am confident that tools within the absence domain (lifting sanctions and cutting aid) are important and effective. Thus, going forward, I need a better theorized way to understand and test the nuanced effectiveness of the two tools in this domain.

### **6.1.2 Other Types of Carrots and Sticks**

In this dissertation, I only focused on foreign aid as economic carrots and comprehensive sanctions as sticks. Indeed, there are many different types of carrots and sticks, let alone economic carrots (e.g., foreign direct investment) and economic

sanctions (e.g., trade embargo). Conceptualizing and empirically testing when and how different types of carrots and sticks (to include diplomatic, medical, cultural, and military) will help us better understand the utility of these tools.

### **6.1.3 The Details**

*Timing and Time Horizon.* When and under what conditions do inducements work better than sanctions? While my experimental studies begin the foundational work of understanding the microfoundations of policy perception, the North Korean case study demonstrated that inducements don't always work better than sanctions. For example, do inducements work better at the beginning of negotiations, when deciding to resume talks, but not as well during the middle? How effective are inducements and sanctions short-term and long-term?

*Number of Actors.* While the survey experiments in China, India, and South Korea relied on a hypothetical U.S.-led coalition promising carrots or threatening with sticks, the North Korean case study implies that multilateral coalitions are harder to maintain and come to a consensus on a common goal. On the other hand, having multiple key players strengthens the credibility and power of promises and threats. A greater understanding of how the effectiveness of each tool changes based on the number of actors and membership (e.g., U.S. and allies vs. U.S., Russia, and China) is needed.

*The Initiator.* In both Chapters 3 and 4's experimental studies, I had set the setting such that it was always the sender state initiating and offering a carrot. As we have seen in Chapter 5, however, carrots were given in practice because the target state requested them. The different consequences of carrots based on who initiated the offering may be an important factor in determining the outcome.

#### **6.1.4 Sender State Perspective**

As my experimental studies focus on the target state perspective, a natural extension would be to examine the sender state perspective as well. How do sender states decide whether to induce and sanction? Are domestic politics the deciding factor, is who the target state is important, or does the degree of offense matter most? How important are target state's demands, as seen in the case of North Korea? Existing research remains limited to examining great powers' use of these tools (Gortzak 2005) and mostly focusing on one foreign policy option at a time (D. W. Drezner 1999a; Kreps and Wallace 2016). As the evidence from the Six Party Talks showed in Chapter 5, both inducements and sanctions are frequently simultaneously utilized. I expect to observe a major shift in public opinion of inducements and sanctions from the target state to the sender state: While carrots can be supported by the public and allow the leader to save face in the target state, convincing constituents that their taxes will reward bad behavior

will be trickier from the sender state perspective. Understanding the preferred policy dynamic between the sender and target states will allow us to better theorize the utility of each foreign policy tool and advise policymakers in the decision-making process.

### **6.1.5 Ethics and Negative Consequences of Inducements**

Relatedly, although inducements can be effective, they may not be an efficient form of reward. Exploring the unintended negative consequences of inducements, as well as the ethics of inducements and sanctions are other avenues of future research. Negative consequences of inducements include second and third-order effects of signaling to other states that they can not only get away with bad behavior, but also get rewarded for it in return. This may, in turn, result in more and more opportunistic actors engaging in “bad behavior” just to gain some carrots along the way. Taking inducements for granted and habitually expecting carrots is dangerous.

### **6.1.6 Nuclear Weapons Proliferation and Inducements Data**

While statistically testing the effectiveness of inducements in nuclear nonproliferation was beyond the scope of this dissertation due to limitations within existing data, I am very interested in returning to and pursuing this question. A large data effort will be required to do so as tracking the latency level of states on a granular



level (weeks, or even days) requires carefully aggregating historical capabilities while relying on open-source information. But gathering this data will be essential as a more nuanced understanding of the effectiveness of positive inducements in nuclear nonproliferation could help further the global nonproliferation regime's agenda and contribute to a more security international community.

## **Appendix A. [Chapter 3] Survey Vignette and Main Dependent Variable (China)**

### ***A.1 Security Condition***

#### **A.1.1 Vignette**

美国情报人士报告称，中国一直在储备（保有）集束炸弹。集束炸弹是不区分平民和战斗人员的武器，使用后可能留下未爆炸的炸弹。在之后的很多年里，这些炸弹可能会伤害平民，并对经济和社会发展不利。

中国是《集束弹药公约》的成员。该公约是一项国际条约，禁止储备集束弹药，并要求销毁这些武器。

中国政府认为，鉴于当今世界的动荡局势，这些集束炸弹仅用于国防目的。因为

最近的情报报告，以**美国**为首的**跨国联盟**承诺: [piped text]。中国政府出于**国家安全**考虑，拒绝放弃集束弹药。

### **A.1.2 Main Questions**

*support* 您支持还是反对**贵国**政府不放弃集束炸彈的**决定**？

- 强烈支持
- 支持
- 比较支持
- 既不支持也不反对
- 比较反对
- 反对
- 强烈反对

*why* 您已表明您对**贵国**政府不放弃集束弹药的**决定**表示[piped text]。为什么？ [text entry]

## **A.2 Human Rights Condition**

### **A.2.1 Vignette**

**美国**情报人士报告称，**中国**对政治**异见**者擅自进行逮捕、拘留和虐待违反了**国际**人权。政治**异见**者是指**公开**反对现政府的人士。

**中国**政府认为，对待政治**异见**者的文化规范和期望存在**差异**。

因为最近的情报报告，以**美国**为首的**跨国联盟**承诺: [piped text]。**中国**政府以文化规范**差异**和**国家安全**考量为由，拒绝颁布改善政治**异见**者待遇的政策。

## A.2.2 Main Questions

*support* 您支持还是反对贵国政府拒绝颁布改善政治异见者待遇的政策的决定？

- 强烈支持
- 支持
- 比较支持
- 既不支持也不反对
- 比较反对
- 反对
- 强烈反对

*why* 您已表明您对贵国政府拒绝颁布改善政治异见者待遇的政策的决定表示 [piped text]。为什么？ [text entry]

## **Appendix B. [Chapter 3] Survey Vignette and Main Dependent Variable (India)**

### ***B.1 Security Condition***

#### **B.1.1 Vignette**

U.S. intelligence sources reported that India has been stockpiling (keeping) cluster munitions. Cluster munitions are weapons that do not distinguish between civilians and combatants. These weapons can also leave behind unexploded bombs which can harm civilians and be bad for economic and social development for many years after use.

**India is a member of the Convention on Cluster Munitions (CCM), which is an international treaty that prohibits stockpiling (keeping) cluster munitions and requires destruction of those weapons.**

**[Control/Sanction/Aid/Cut Aid/Lift Sanction]** The Indian government has argued that these cluster munitions are for purely defensive purposes, given the uncertain times in world affairs and has refused to give up the cluster munitions, citing national security concerns.

## **B.1.2 Main Questions**

*support* Do you support or oppose your government's decision to NOT give up cluster munitions?

- Strongly Support
- Support
- Somewhat Support
- Neither Support Nor Oppose
- Somewhat Oppose
- Oppose
- Strongly Oppose

*why* You have indicated that you [piped text] your government's decision to not give up cluster munitions. Why?

## **B.2 Human Rights Condition**

### **B.2.1 Vignette**

U.S. intelligence sources reported that India is in violation of international human rights for the arbitrary arrest, detention, and bad treatment of political dissidents. Political dissidents are people who openly disagree with the current government.

**The Indian government has argued that there are differences in cultural norms and expectations of treating political dissidents.**

**[Control/Sanction/Aid/Cut Aid/Lift Sanction].** Citing differences in cultural norms and national security concerns, the Indian government has refused to enact policies to better treat political dissidents.

## B.2.2 Main Questions

*support* Do you support or oppose your government's decision to NOT enact policies to improve the treatment of political dissidents?

- Strongly Support
- Support
- Somewhat Support
- Neither Support Nor Oppose
- Somewhat Oppose
- Oppose
- Strongly Oppose

*why* You have indicated that you [piped text] your government's decision to not enact policies to improve the treatment of political dissidents. Why?

## Appendix C. [Chapter 3] Survey Vignette and Main Dependent Variable (South Korea)

### C.1 Security Condition

#### C.1.1 Vignette

최근 미국 정보기관은 한국이 확산탄을 비축하고 있다고 보고했다. 확산탄은 민간인과 군인을 구분하지 못하는 무기이다. 그렇기에 이 무기는 불발탄을 남겨 민간을 해칠 수 있으며 사용 후 오랫동안 경제 및 사회적 개발에 악영향을 줄 수 있다.

한국은 국제 조약인 확산탄금지협정(CCM) 회원국으로, 확산탄 비축을 금지하고 비축된 무기를 제거해야 한다.

한국 정부는 불확실한 국제 정세를 고려할 때 현재 비축된 확산탄은 순수한 방어 목적이라고 주장한다. **최근에 폭로된 사실을 고려하여 미국이 주도하는 다국적 연합체는 [piped text] 약속했다.** 한국 정부는 국가 안보가 우려된다며 확산탄 포기를 거부하고 있다.

#### C.1.2 Main Questions

*support* 귀하는 정부가 확산탄을 포기하지 않겠다는 결정을 지지하십니까 아니면 반대하십니까?

- 강력히 지지한다
- 지지한다
- 다소 지지한다
- 지지하지도 반대하지도 않는다
- 다소 동의하지 않는다
- 반대한다
- 강력히 반대한다



*why* 귀하는 한국 정부가 집속탄을 포기하지 않겠다는 결정을 [piped text]고 하셨습니다. 그 이유는 무엇입니까? [text entry]

## **C.2 Human Rights Condition**

### **C.2.1 Vignette**

최근 미국 정보기관은 한국이 반정부 인사를 무차별 체포, 구금, 학대하여 국제인권법을 위반하고 있다고 보고했다. 반정부 인사는 현 정부에 대해 공개적으로 반대하는 사람들이다.

한국 정부는 서양과 한국의 문화 규범 및 반정부 인사 처우에 대한 기대치가 다르다고 주장하고 있다.

최근에 폭로된 사실을 고려하여 미국이 주도하는 다국적 연합체는 [piped text] 약속했다. 정부는 문화 차이 및 국가 안보가 우려된다는 이유로 보고서에 나온 국제인권법 위반 사항을 인정하지 않고 반정부 인사 처우 개선을 거부하고 있다.

### **C.2.2 Main Questions**

*support* 귀하는 한국 정부가 반정부 인사 처우를 개선 하지 않겠다고 결정한 것을 지지하십니까 아니면 반대하십니까?

- 강력히 지지한다
- 지지한다
- 다소 지지한다
- 지지하지도 반대하지도 않는다
- 다소 동의하지 않는다
- 반대한다
- 강력히 반대한다

*why* 귀하는 한국 정부가 반정부 인사 처우를 개선 하지 않겠다고 결정한 것을 [piped text]고 하셨습니다. 그 이유는 무엇입니까? [text entry]

## Appendix D. [Chapter 3] Results

Table 21: China CCM Results (4 Treatments)

	<i>Dependent variable:</i>			
	Gov't Support			
	(1)	(2)	(3)	(4)
Sanction	0.052 (0.161)			
Aid		-0.112 (0.164)		
Cut Aid			-0.039 (0.162)	
Lift Sanction				0.084 (0.167)
US Favorability	0.095*** (0.033)	0.095*** (0.033)	0.094*** (0.034)	0.094*** (0.033)
Party (CCP)	0.155 (0.155)	0.152 (0.155)	0.152 (0.155)	0.152 (0.155)
Income	-0.024 (0.061)	-0.023 (0.061)	-0.023 (0.061)	-0.025 (0.061)
Education	0.093 (0.071)	0.094 (0.071)	0.092 (0.071)	0.094 (0.071)
Age	-0.011 (0.007)	-0.011 (0.007)	-0.011* (0.007)	-0.011* (0.007)
Gender	-0.053 (0.133)	-0.050 (0.133)	-0.052 (0.133)	-0.050 (0.133)
Observations	748	748	748	748
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01			

Table 22: China HR Results (4 Treatments)

	<i>Dependent variable:</i>			
	Gov't Support			
	(1)	(2)	(3)	(4)
Sanction	-0.264 (0.165)			
Aid		0.141 (0.163)		
Cut Aid			-0.023 (0.164)	
Lift Sanction				0.049 (0.168)
US Favorability	0.156*** (0.034)	0.153*** (0.034)	0.153*** (0.034)	0.154*** (0.034)
Party (CCP)	0.373** (0.152)	0.381** (0.153)	0.375** (0.153)	0.373** (0.152)
Income	-0.096 (0.060)	-0.095 (0.060)	-0.095 (0.060)	-0.095 (0.060)
Education	0.185** (0.072)	0.188*** (0.072)	0.188*** (0.072)	0.187*** (0.072)
Age	-0.001 (0.007)	-0.001 (0.007)	-0.001 (0.007)	-0.001 (0.007)
Gender	0.464*** (0.135)	0.482*** (0.135)	0.478*** (0.135)	0.476*** (0.135)
Observations	745	745	745	745
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01		

**Table 23: China CCM & HR (2 Treatments)**

	<i>Dependent variable:</i>	
	Gov't Support	
	(1)	(2)
Carrot	0.048 (0.095)	
Stick		-0.085 (0.094)
US Favorability	0.122*** (0.024)	0.121*** (0.024)
Party	0.254** (0.108)	0.252** (0.108)
Income	-0.050 (0.042)	-0.048 (0.043)
Education	0.138*** (0.050)	0.138*** (0.050)
Age	-0.007 (0.005)	-0.007 (0.005)
Gender	0.199** (0.094)	0.199** (0.094)
Observations	1,493	1,493
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Table 24: China CCM & HR (4 Treatments)

	<i>Dependent variable:</i>			
	Gov't Support			
	(1)	(2)	(3)	(4)
Sanction	-0.103 (0.115)			
Aid		-0.004 (0.115)		
Cut Aid			-0.025 (0.115)	
Lift Sanction				0.078 (0.118)
US Favorability	0.123*** (0.024)	0.122*** (0.024)	0.122*** (0.024)	0.122*** (0.024)
Party	0.250** (0.108)	0.253** (0.108)	0.253** (0.108)	0.253** (0.108)
Income	-0.049 (0.042)	-0.049 (0.042)	-0.049 (0.043)	-0.050 (0.042)
Education	0.137*** (0.050)	0.138*** (0.050)	0.138*** (0.050)	0.138*** (0.050)
Age	-0.007 (0.005)	-0.007 (0.005)	-0.007 (0.005)	-0.007 (0.005)
Gender	0.196** (0.094)	0.199** (0.094)	0.200** (0.094)	0.199** (0.094)
Observations	1,493	1,493	1,493	1,493
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01			

Table 25: India CCM Results (4 Treatments)

	<i>Dependent variable:</i>			
	Gov't Support			
	(1)	(2)	(3)	(4)
Sanction	0.180 (0.150)			
Aid		-0.462*** (0.161)		
Cut Aid			-0.121 (0.155)	
Lift Sanction				0.029 (0.158)
US Favorability	-0.098*** (0.030)	-0.100*** (0.030)	-0.098*** (0.031)	-0.097*** (0.030)
Party (BJP)	0.671*** (0.132)	0.680*** (0.132)	0.661*** (0.132)	0.663*** (0.132)
Income	0.011 (0.069)	0.015 (0.069)	0.014 (0.069)	0.013 (0.069)
Education	0.046 (0.052)	0.047 (0.052)	0.045 (0.052)	0.044 (0.052)
Age	0.001* (0.001)	0.001 (0.001)	0.001* (0.001)	0.001 (0.001)
Gender	0.007 (0.126)	0.019 (0.126)	0.008 (0.126)	0.007 (0.126)
Observations	806	806	806	806

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 26: India HR Results (4 Treatments)

	<i>Dependent variable:</i>			
	Gov't Support			
	(1)	(2)	(3)	(4)
Sanction	0.286* (0.153)			
Aid		-0.528*** (0.155)		
Cut Aid			0.198 (0.154)	
Lift Sanction				-0.158 (0.160)
US Favorability	-0.060* (0.031)	-0.059* (0.031)	-0.059* (0.031)	-0.059* (0.031)
Party (BJP)	0.810*** (0.134)	0.825*** (0.134)	0.823*** (0.134)	0.822*** (0.134)
Income	0.006 (0.071)	0.0005 (0.071)	-0.001 (0.071)	0.005 (0.071)
Education	-0.007 (0.052)	-0.00003 (0.052)	-0.009 (0.052)	-0.009 (0.052)
Age	-0.0002 (0.001)	-0.0001 (0.001)	-0.0001 (0.001)	-0.0001 (0.001)
Gender	0.031 (0.126)	0.046 (0.126)	0.032 (0.126)	0.025 (0.126)
Observations	806	806	806	806
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01			

Table 27: India CCM & HR (2 Treatments)

	<i>Dependent variable:</i>	
	Gov't Support	
	(1)	(2)
Carrot	-0.373*** (0.091)	
Stick		0.191** (0.089)
US Favorability	-0.076*** (0.022)	-0.075*** (0.022)
Party	0.740*** (0.094)	0.731*** (0.094)
Income	0.009 (0.049)	0.004 (0.049)
Education	0.022 (0.037)	0.021 (0.037)
Age	0.001 (0.0004)	0.001 (0.0004)
Gender	0.033 (0.089)	0.035 (0.089)
Observations	1,612	1,612
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	



Table 28: India CCM & HR (4 Treatments)

	<i>Dependent variable:</i>			
	Gov't Support			
	(1)	(2)	(3)	(4)
Sanction	0.236** (0.107)			
Aid		-0.507*** (0.111)		
Cut Aid			0.042 (0.109)	
Lift Sanction				-0.058 (0.112)
US Favorability	-0.076*** (0.022)	-0.077*** (0.022)	-0.075*** (0.022)	-0.075*** (0.022)
Party	0.727*** (0.094)	0.736*** (0.094)	0.726*** (0.093)	0.726*** (0.093)
Income	0.006 (0.049)	0.006 (0.049)	0.005 (0.049)	0.006 (0.049)
Education	0.022 (0.037)	0.025 (0.037)	0.019 (0.036)	0.019 (0.036)
Age	0.001 (0.0004)	0.001 (0.0004)	0.001 (0.0004)	0.001 (0.0004)
Gender	0.034 (0.089)	0.048 (0.089)	0.033 (0.089)	0.031 (0.089)
Observations	1,612	1,612	1,612	1,612
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01			

Table 29: Korea CCM Results (4 Treatments)

	<i>Dependent variable:</i>			
	Gov't Support			
	(1)	(2)	(3)	(4)
Sanction	-0.063 (0.159)			
Aid		-0.292* (0.160)		
Cut Aid			0.093 (0.161)	
Lift Sanction				0.139 (0.159)
US Favorability	-0.087* (0.050)	-0.082 (0.050)	-0.087* (0.050)	-0.087* (0.050)
Party	0.543*** (0.130)	0.541*** (0.130)	0.543*** (0.130)	0.538*** (0.131)
Income	0.016 (0.069)	0.016 (0.069)	0.015 (0.069)	0.018 (0.069)
Education	0.009 (0.052)	0.006 (0.053)	0.010 (0.053)	0.008 (0.052)
Age	0.010* (0.005)	0.010* (0.005)	0.010* (0.005)	0.010* (0.005)
Gender	-0.152 (0.136)	-0.152 (0.136)	-0.152 (0.136)	-0.153 (0.136)
Observations	764	764	764	764
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01			

**Table 30: Korea HR Results (4 Treatments)**

	<i>Dependent variable:</i>			
	Gov't Support			
	(1)	(2)	(3)	(4)
Sanction	0.667*** (0.164)			
Aid		-0.299* (0.164)		
Cut Aid			-0.124 (0.160)	
Lift Sanction				-0.226 (0.162)
US Favorability	0.002 (0.050)	0.002 (0.050)	0.003 (0.050)	0.005 (0.050)
Party	1.200*** (0.136)	1.201*** (0.136)	1.191*** (0.136)	1.186*** (0.136)
Income	-0.059 (0.063)	-0.045 (0.063)	-0.047 (0.063)	-0.048 (0.063)
Education	-0.063 (0.051)	-0.065 (0.051)	-0.063 (0.051)	-0.063 (0.051)
Age	-0.014*** (0.005)	-0.014*** (0.005)	-0.014*** (0.005)	-0.014*** (0.005)
Gender	-0.099 (0.133)	-0.082 (0.132)	-0.080 (0.132)	-0.082 (0.132)
Observations	756	756	756	756

*Note:* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 31: Korea CCM & HR (2 Treatments)

	<i>Dependent variable:</i>	
	Gov't Support	
	(1)	(2)
Carrot	-0.211** (0.093)	
Stick		0.180* (0.093)
US Favorability	-0.042 (0.035)	-0.044 (0.035)
Party	0.822*** (0.093)	0.819*** (0.093)
Income	-0.012 (0.046)	-0.012 (0.046)
Education	-0.031 (0.036)	-0.029 (0.036)
Age	-0.002 (0.003)	-0.002 (0.003)
Gender	-0.121 (0.094)	-0.123 (0.094)
Observations	1,520	1,520
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Table 32: Korea CCM & HR (4 Treatments)

	<i>Dependent variable:</i>			
	Gov't Support			
	(1)	(2)	(3)	(4)
Sanction	0.283** (0.113)			
Aid		-0.282** (0.114)		
Cut Aid			-0.016 (0.113)	
Lift Sanction				-0.036 (0.114)
US Favorability	-0.043 (0.035)	-0.043 (0.035)	-0.045 (0.035)	-0.045 (0.035)
Party	0.823*** (0.093)	0.822*** (0.093)	0.818*** (0.093)	0.818*** (0.093)
Income	-0.012 (0.046)	-0.011 (0.046)	-0.010 (0.046)	-0.011 (0.046)
Education	-0.032 (0.036)	-0.032 (0.036)	-0.030 (0.036)	-0.030 (0.036)
Age	-0.003 (0.003)	-0.002 (0.003)	-0.002 (0.003)	-0.002 (0.003)
Gender	-0.128 (0.094)	-0.120 (0.094)	-0.121 (0.094)	-0.121 (0.094)
Observations	1,520	1,520	1,520	1,520

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## References

- Ahmed, Sadrudin A., and Alain d'Astous. 1995. "Comparison of Country of Origin Effects on Household and Organizational Buyers' Product Perceptions." *European Journal of Marketing* 29 (3): 35–51. <https://doi.org/10.1108/03090569510145741>.
- Aldrich, John H., Christopher Gelpi, Peter Feaver, Jason Reifler, and Kristin Thompson Sharp. 2006. "Foreign Policy and the Electoral Connection." *Annual Review of Political Science* 9 (1): 477–502.
- Aldrich, John H., John L. Sullivan, and Eugene Borgida. 1989. "Foreign Affairs and Issue Voting: Do Presidential Candidates 'Waltz Before a Blind Audience?'" *American Political Science Review* 83 (1): 123–41.
- Alesina, Alberto, and David Dollar. 2000. "Who Gives Foreign Aid to Whom and Why?" *Journal of Economic Growth* 5 (1): 33–63.
- Allen, Susan Hannah. 2005. "The Determinants of Economic Sanctions Success and Failure." *International Interactions* 31 (2): 117–38.
- Allendoerfer, Michelle Giacobbe. 2017. "Who Cares about Human Rights? Public Opinion about Human Rights Foreign Policy." *Journal of Human Rights* 16 (4): 428–51.
- Andrews, Talbot M., Andrew W. Delton, and Reuben Kline. 2021. "Is a Rational Politics of Disaster Possible? Making Useful Decisions for Others in an Experimental Disaster Game." *Political Behavior*, March.
- Arens, Janneke. 1997. "Winning Hearts and Minds: Foreign Aid and Militarisation in the Chittagong Hill Tracts." *Economic and Political Weekly* 32 (29): 1811–19.
- Ariely, Dan, Anat Bracha, and Stephan Meier. 2009. "Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Prosocially." *American Economic Review* 99 (1): 544–55.
- Atran, Scott. 2016. "The Devoted Actor: Unconditional Commitment and Intractable Conflict across Cultures." *Current Anthropology* 57 (S13): S192–203.

- Ausderan, Jacob. 2014. "How Naming and Shaming Affects Human Rights Perceptions in the Shamed Country." *Journal of Peace Research* 51 (1): 81–95.
- Bae, Jong-Yun. 2010. "South Korean Strategic Thinking toward North Korea: The Evolution of the Engagement Policy and Its Impact upon U.S.-ROK Relations." *Asian Survey* 50 (2): 335–55.
- Balabanis, George, and Adamantios Diamantopoulos. 2004. "Domestic Country Bias, Country-of-Origin Effects, and Consumer Ethnocentrism: A Multidimensional Unfolding Approach." *Journal of the Academy of Marketing Science* 32 (1): 80–95.
- Baldwin, David Allen. 1985. *Economic Statecraft*. Princeton University Press.
- Bartels, Larry M. 1991. "Constituency Opinion and Congressional Policy Making: The Reagan Defense Build Up." *The American Political Science Review* 85 (2): 457–74.
- Battaglini, Marco, Rebecca B. Morton, and Thomas R. Palfrey. 2009. "The Swing Voter's Curse in the Laboratory." *Review of Economic Studies* 77 (1): 61–89.
- Baum, Matthew A. 2004. "Going Private: Public Opinion, Presidential Rhetoric, and the Domestic Politics of Audience Costs in U.S. Foreign Policy Crises." *Journal of Conflict Resolution* 48 (5): 603–31.
- Bearce, David H., and Daniel C. Tirone. 2010. "Foreign Aid Effectiveness and the Strategic Goals of Donor Governments." *The Journal of Politics* 72 (3): 837–51.
- Beath, Andrew, Fotini Christia, and Ruben Enikolopov. 2012. *Winning Hearts and Minds through Development? Evidence from a Field Experiment in Afghanistan*. Policy Research Working Papers. The World Bank.
- Bénabou, Roland, and Jean Tirole. 2006. "Incentives and Prosocial Behavior." *American Economic Review* 96 (5): 1652–78.
- Berinsky, Adam J. 2007. "Assuming the Costs of War: Events, Elites, and American Public Support for Military Conflict." *The Journal of Politics* 69 (4): 975–97.
- — —. 2009. *In Time of War: Understanding American Public Opinion from World War II to Iraq*. University of Chicago Press.

- Berinsky, Adam J., Gregory A. Huber, and Gabriel S. Lenz. 2012. "Evaluating Online Labor Markets for Experimental Research: Amazon.Com's Mechanical Turk." *Political Analysis* 20 (3): 351–68.
- Berinsky, Adam J., Michele F. Margolis, and Michael W. Sances. 2014. "Separating the Shirkers from the Workers? Making Sure Respondents Pay Attention on Self-Administered Surveys." *American Journal of Political Science* 58 (3): 739–53.
- — —. 2016. "Can We Turn Shirkers into Workers?" *Journal of Experimental Social Psychology, Rigorous and Replicable Methods in Social Psychology*, 66 (September): 20–28.
- Bermeo, Sarah Blodgett, and David Leblang. 2015. "Migration and Foreign Aid." *International Organization* 69 (3): 627–57.
- Berthélemy, Jean-Claude, and Ariane Tichit. 2004. "Bilateral Donors' Aid Allocation Decisions--a Three-Dimensional Panel Analysis." *International Review of Economics & Finance* 13 (3): 253–74.
- Bickel, W. K., J. A. Pitcock, R. Yi, and E. J. C. Angtuaco. 2009. "Congruence of BOLD Response across Intertemporal Choice Conditions: Fictive and Real Money Gains and Losses." *Journal of Neuroscience* 29 (27): 8839–46.
- Boas, Taylor C., Dino P. Christenson, and David M. Glick. 2020. "Recruiting Large Online Samples in the United States and India: Facebook, Mechanical Turk, and Qualtrics." *Political Science Research and Methods* 8 (2): 232–50.
- Brader, Ted. 2005. "Striking a Responsive Chord: How Political Ads Motivate and Persuade Voters by Appealing to Emotions." *American Journal of Political Science* 49 (2): 388–405.
- Brader, Ted, and George E. Marcus. 2013. "Emotion and Political Psychology." In *The Oxford Handbook of Political Psychology, 2nd Ed*, 165–204. New York, NY, US: Oxford University Press.
- Breen, Oonagh B. 2015. "Allies or Adversaries: Foundation Responses to Government Policing of Cross-Border Charity." *International Journal of Not-for-Profit Law* 17: 45.



- Brody, Richard. 1991. *Assessing the President: The Media, Elite Opinion, and Public Support*. Stanford University Press.
- Brown, Penelope, and Stephen C. Levinson. 1978. "Universals in Language Usage: Politeness Phenomena." *Questions and Politeness: Strategies in Social Interaction*, 56–311.
- Brown, Penelope, Stephen C. Levinson, and Stephen C. Levinson. 1987. *Politeness: Some Universals in Language Usage*. Cambridge University Press.
- Buhrmester, Michael, Tracy Kwang, and Samuel D. Gosling. 2016. *Amazon's Mechanical Turk: A New Source of Inexpensive, yet High-Quality Data? Methodological Issues and Strategies in Clinical Research*, 4th Ed. Washington, DC, US: American Psychological Association.
- Burnside, Craig, and David Dollar. 2000. "Aid, Policies, and Growth." *American Economic Review* 90 (4): 847–68.
- Büthe, Tim, Solomon Major, and André de Mello e Souza. 2012. "The Politics of Private Foreign Aid: Humanitarian Principles, Economic Development Objectives, and Organizational Interests in NGO Private Aid Allocation." *International Organization* 66 (4): 571–607.
- Camerer, Colin F., and Robin M. Hogarth. 1999. "The Effects of Financial Incentives in Experiments: A Review and Capital-Labor-Production Framework." *Journal of Risk and Uncertainty* 19 (1): 7–42.
- Cha, Victor. 2012. *The Impossible State: North Korea, Past and Future*. Random House.
- Cha, Victor D., and David C. Kang. 2004. "The Debate over North Korea." *Political Science Quarterly* 119 (2): 229–54.
- Charnysh, Volha, Christopher Lucas, and Prerna Singh. 2015. "The Ties That Bind: National Identity Salience and Pro-Social Behavior Toward the Ethnic Other." *Comparative Political Studies* 48 (3): 267–300.
- Chilton, Adam S. 2015. "The Laws of War and Public Opinion: An Experimental Study." *Journal of Institutional and Theoretical Economics (JITE) / Zeitschrift Für Die Gesamte Staatswissenschaft* 171 (1): 181–201.

- Claassen, Ryan L., and John Barry Ryan. 2016. "Social Desirability, Hidden Biases, and Support for Hillary Clinton." *PS: Political Science & Politics* 49 (4): 730–35.
- Clifford, Scott, Ryan M Jewell, and Philip D Waggoner. 2015. "Are Samples Drawn from Mechanical Turk Valid for Research on Political Ideology?" *Research & Politics* 2 (4): 2053168015622072.
- Cortright, David, George A. Lopez, and Professor George A. Lopez. 2002. *Smart Sanctions: Targeting Economic Statecraft*. Rowman & Littlefield.
- Coser, Lewis A. 1956. *The Functions of Social Conflict*. Routledge.
- Damasio, Antonio R. 1994. "Descartes' Error: Emotion, Rationality and the Human Brain." *New York: Putnam* 352.
- Damasio, H., T. Grabowski, R. Frank, A. M. Galaburda, and A. R. Damasio. 1994. "The Return of Phineas Gage: Clues about the Brain from the Skull of a Famous Patient." *Science* 264 (5162): 1102–5.
- Dasandi, Niheer, Jonathan Fisher, David Hudson, and Jennifer vanHeerde-Hudson. 2021. "Human Rights Violations, Political Conditionality and Public Attitudes to Foreign Aid: Evidence from Survey Experiments." *Political Studies*, January, 0032321720980895.
- Davis, Patricia A. 1999. *The Art of Economic Persuasion: Positive Incentives and German Economic Diplomacy*. University of Michigan Press.
- DeMeritt, Jacqueline H. R. 2012. "International Organizations and Government Killing: Does Naming and Shaming Save Lives?" *International Interactions* 38 (5): 597–621.
- Dietrich, Simone, and Matthew S. Winters. 2015. "Foreign Aid and Government Legitimacy." *Journal of Experimental Political Science* 2 (2): 164–71.
- Dorussen, Han. 2001. "Mixing Carrots with Sticks: Evaluating the Effectiveness of Positive Incentives." *Journal of Peace Research* 38 (2): 251–62.
- Dreher, Axel, Peter Nunnenkamp, and Rainer Thiele. 2008. "Does US Aid Buy UN General Assembly Votes? A Disaggregated Analysis." *Public Choice* 136 (1): 139–64.

- Drezner, Daniel. 2007. "Allies, Adversaries, and Economic Coercion: Russian Foreign Economic Policy since 1991." *Security Studies* 6 (3): 65–111.
- Drezner, Daniel W. 1999a. "The Trouble with Carrots: Transaction Costs, Conflict Expectations, and Economic Inducements." *Security Studies* 9 (1–2): 188–218.
- — —. 1999b. *The Sanctions Paradox: Economic Statecraft and International Relations*.
- — —. 2002. "Conflict Expectations and the Paradox of Economic Coercion." *International Studies Quarterly* 42 (4): 709–31.
- Easterly, William, Ross Levine, and David Roodman. 2004. "Aid, Policies, and Growth: Comment." *American Economic Review* 94 (3): 774–80.
- Enns, Peter K. 2014. "The Public's Increasing Punitiveness and Its Influence on Mass Incarceration in the United States." *American Journal of Political Science* 58 (4): 857–72.
- Findley, Michael G., Adam S. Harris, Helen V. Milner, and Daniel L. Nielson. 2017. "Who Controls Foreign Aid? Elite versus Public Perceptions of Donor Influence in Aid-Dependent Uganda." *International Organization* 71 (4): 633–63.
- Fishstein, Paul, and Andrew Wilder. 2012. "Winning Hearts and Minds? Examining the Relationship between Aid and Security in Afghanistan," 92.
- Forsythe, David. 2002. "US Foreign Policy and Human Rights." *Journal of Human Rights* 1 (4): 501–21.
- Galtung, Johan. 1967. "On the Effects of International Economic Sanctions, With Examples from the Case of Rhodesia." *World Politics* 19 (3): 378–416.
- Gibbons, Robert. 1998. "Incentives in Organizations." *Journal of Economic Perspectives* 12 (4): 115–32.
- Gneezy, Uri, Stephan Meier, and Pedro Rey-Biel. 2011. "When and Why Incentives (Don't) Work to Modify Behavior." *Journal of Economic Perspectives* 25 (4): 191–210.

- Gortzak, Yoav. 2005. "How Great Powers Rule: Coercion and Positive Inducements in International Order Enforcement." *Security Studies* 14 (4): 663–97.
- Grant, Ruth W. 2002. "The Ethics of Incentives: Historical Origins and Contemporary Understandings." *Economics & Philosophy* 18 (1): 111–39.
- — —. 2006. "Ethics and Incentives: A Political Approach." *American Political Science Review* 100 (1): 29–39.
- — —. 2011. *Strings Attached. Strings Attached*. Princeton University Press.
- Greene, Joshua, and Jonathan Haidt. 2002. "How (and Where) Does Moral Judgment Work?" *Trends in Cognitive Sciences* 6 (12): 517–23.
- Guisinger, Alexandra. 2009. "Determining Trade Policy: Do Voters Hold Politicians Accountable?" *International Organization* 63 (3): 533–57.
- Guitart-Masip, Marc, Rumana Chowdhury, Tali Sharot, Peter Dayan, Emrah Duzel, and Raymond J. Dolan. 2012. "Action Controls Dopaminergic Enhancement of Reward Representations." *Proceedings of the National Academy of Sciences* 109 (19): 7511–16.
- Guitart-Masip, Marc, Marcos Economides, Quentin J. M. Huys, Michael J. Frank, Rumana Chowdhury, Emrah Duzel, Peter Dayan, and Raymond J. Dolan. 2014. "Differential, but Not Opponent, Effects of l-DOPA and Citalopram on Action Learning with Reward and Punishment." *Psychopharmacology* 231 (5): 955–66.
- Haass Richard, N. 1998. *Economic Sanctions and American Diplomacy*. New York.
- Hafner-Burton, Emilie M., D. Alex Hughes, and David G. Victor. 2013. "The Cognitive Revolution and the Political Psychology of Elite Decision Making." *Perspectives on Politics* 11 (2): 368–86.
- Hamman, John R., Roberto A. Weber, and Jonathan Woon. 2011. "An Experimental Investigation of Electoral Delegation and the Provision of Public Goods." *American Journal of Political Science* 55 (4): 738–52.
- He, Jia, and Fons van de Vijver. 2012. "Bias and Equivalence in Cross-Cultural Research." *Online Readings in Psychology and Culture* 2 (2).

- Hertwig, Ralph, and Andreas Ortmann. 2001. "Experimental Practices in Economics: A Methodological Challenge for Psychologists?" *Behavioral and Brain Sciences* 24 (3): 383–403.
- Hinckley, Ronald H. 1988. "Public Attitudes toward Key Foreign Policy Events." *Journal of Conflict Resolution* 32 (2): 295–318.
- Holsti, Ole R. 1996. "Public Opinion on Human Rights in American Foreign Policy | American Diplomacy Est 1996." 1996.  
<https://americandiplomacy.web.unc.edu/1996/09/public-opinion-on-human-rights-in-american-foreign-policy-2/>.
- Houghton, David Patrick. 2014. *Political Psychology: Situations, Individuals, and Cases*. Routledge.
- Hufbauer, Gary Clyde, and Jeffrey J. Schott. 1985. "Economic Sanctions and U. S. Foreign Policy." *PS* 18 (4): 727–35.
- Hufbauer, Gary Clyde, Jeffrey J. Schott, 1949-, Kimberly Ann Elliott, and 1960-. 1983. *Economic Sanctions in Support of Foreign Policy Goals*. Institute for International Economics.
- Hufbauer, Gary Clyde, Jeffrey J. Schott, Kimberly Ann Elliott, and Institute for International Economics (U.S.). 1990. *Economic Sanctions Reconsidered: History and Current Policy*. Peterson Institute.
- Hurlock, Elizabeth Bergner. n.d. *The Value of Praise and Reproof as Incentives for Children,; By Elizabeth B. Hurlock*.
- Izumikawa, Yasuhiro. 2013. "To Coerce or Reward? Theorizing Wedge Strategies in Alliance Politics." *Security Studies* 22 (3): 498–531.
- James, Patrick, and John R. Oneal. 1991. "The Influence of Domestic and International Politics on the President's Use of Force." *The Journal of Conflict Resolution* 35 (2): 307–32.
- Jervis, Robert. 1989. "Political Psychology: Some Challenges and Opportunities." *Political Psychology* 10 (3): 481–93.

- Johnston, Christopher D., Howard Lavine, and Benjamin Woodson. 2015. "Emotion and Political Judgment: Expectancy Violation and Affective Intelligence." *Political Research Quarterly* 68 (3): 474–92.
- Kaempfer, William H., and Anton D. Lowenberg. 1992. *International Economic Sanctions: A Public Choice Perspective*.
- Kahane, Leo H. 2021. "Politicizing the Mask: Political, Economic and Demographic Factors Affecting Mask Wearing Behavior in the USA." *Eastern Economic Journal* 47 (2): 163–83.
- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. 1990. "Experimental Tests of the Endowment Effect and the Coase Theorem." *Journal of Political Economy* 98 (6): 1325–48.
- — —. 1991. "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias." *Journal of Economic Perspectives* 5 (1): 193–206.
- Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica* 47 (2): 263.
- Kamenica, Emir. 2012. "Behavioral Economics and Psychology of Incentives."
- Kelley, Judith. 2017. *Scorecard Diplomacy*. Cambridge University Press.
- Kertzer, Joshua D. 2020. "Re-Assessing Elite-Public Gaps in Political Behavior." *American Journal of Political Science*.
- Kertzer, Joshua D., and Thomas Zeitzoff. 2017. "A Bottom-Up Theory of Public Opinion about Foreign Policy." *American Journal of Political Science* 61 (3): 543–58.
- Kimball, Spencer H. 2019. "Survey Data Collection; Online Panel Efficacy. A Comparative Study of Amazon MTurk and Research Now SSI/ Survey Monkey/ Opinion Access." *Journal of Business Diversity* 19 (2).
- Kinzelbach, Katrin. 2019. "Human Rights in Chinese Foreign Policy: A Battle for Global Public Opinion." *Handbook on Human Rights in China*, June.

- Kohn, Alfie. 1999. *Punished by Rewards: The Trouble with Gold Stars, Incentive Plans, A's, Praise, and Other Bribes*.
- Koliev, Faradj. 2018. "Naming and Shaming : The Politics and Effectiveness of Social Pressure in the ILO."
- Krain, Matthew. 2012. "J'accuse! Does Naming and Shaming Perpetrators Reduce the Severity of Genocides or Politicides?1." *International Studies Quarterly* 56 (3): 574–89.
- Kramer, Andrew E. 2020. "Desperate for Aid, Ukraine First Has to Fight Corruption." *The New York Times*, March 27, 2020, sec. World.  
<https://www.nytimes.com/2020/03/27/world/europe/ukraine-foreign-aid-corruption.html>.
- Kreps, Sarah E, and Geoffrey PR Wallace. 2016. "International Law, Military Effectiveness, and Public Support for Drone Strikes." *Journal of Peace Research* 53 (6): 830–44.
- Krumpal, Ivar. 2013. "Determinants of Social Desirability Bias in Sensitive Surveys: A Literature Review." *Quality & Quantity* 47 (4): 2025–47.
- Kühberger, Anton, Michael Schulte-Mecklenbeck, and Josef Perner. 2002. "Framing Decisions: Hypothetical and Real." *Organizational Behavior and Human Decision Processes* 89 (2): 1162–75.
- Kuziemko, Ilyana, and Eric Werker. 2006. "How Much Is a Seat on the Security Council Worth? Foreign Aid and Bribery at the United Nations." *Journal of Political Economy* 114 (5): 905–30.
- Laub, Zachary. 2015. "International Sanctions on Iran." Council on Foreign Relations. 2015. <https://www.cfr.org/background/international-sanctions-iran>.
- Lazear, Edward P. 2000. "Performance Pay and Productivity." *American Economic Review* 90 (5): 1346–61.
- Lee, Sangkeun, and Chung-in Moon. 2020. *Korean Unification Policy*. Routledge Handbooks Online.

- Lewis, Simon, Humeyra Pamuk, and Daphne Psaledakis. 2021. "Biden Threatened Myanmar Sanctions. What Are His Options?" *Reuters*, February 2, 2021, sec. APAC. <https://www.reuters.com/article/us-myanmar-politics-usa-options-analysis-idUSKBN2A20ES>.
- Li, Shubo, and Helge Rønning. 2013. "Winning Hearts and Minds: Chinese Soft Power Foreign Policy in Africa." *CMI Brief* 3. <https://www.cmi.no/publications/4906-winning-hearts-and-minds>.
- Lindsay, James M., and Randall B. Ripley. 1992. "Foreign and Defense Policy in Congress: A Research Agenda for the 1990s." *Legislative Studies Quarterly* 17 (3): 417–49.
- Litman, Leib, Jonathan Robinson, and Cheskie Rosenzweig. 2015. "The Relationship between Motivation, Monetary Compensation, and Data Quality among US- and India-Based Workers on Mechanical Turk." *Behavior Research Methods* 47 (2): 519–28.
- Locander, William, Seymour Sudman, and Norman Bradburn. 1976. "An Investigation of Interview Method, Threat and Response Distortion." *Journal of the American Statistical Association* 71 (354): 269–75.
- Locey, Matthew L., Bryan A. Jones, and Howard Rachlin. 2011. "Real and Hypothetical Rewards." *Judgment and Decision Making* 6 (6): 552–64.
- Long, William J. 1996. *Economic Incentives and Bilateral Cooperation*. University of Michigan Press.
- Luard, Evan. 1980. "Human Rights and Foreign Policy." *International Affairs (Royal Institute of International Affairs 1944-)* 56 (4): 579–606.
- Lutfeali, Samina, Tisheya Ward, Tenay Greene, Josh Arshonsky, Azizi Seixas, Madeline Dalton, and Marie A. Bragg. 2020. "Understanding the Extent of Adolescents' Willingness to Engage With Food and Beverage Companies' Instagram Accounts: Experimental Survey Study." *JMIR Public Health and Surveillance* 6 (4): e20336.



- MacKuen, Michael, Jennifer Wolak, Luke Keele, and George E. Marcus. 2010. "Civic Engagements: Resolute Partisanship or Reflective Deliberation." *American Journal of Political Science* 54 (2): 440–58.
- Madson, Gabriel J., and D. Sunshine Hillygus. 2020. "All the Best Polls Agree with Me: Bias in Evaluations of Political Polling." *Political Behavior* 42 (4): 1055–72.
- Maizels, Alfred, and Machiko K. Nissanke. 1984. "Motivations for Aid to Developing Countries." *World Development* 12 (9): 879–900.
- Markides, Kyriacos C., and Steven F. Cohn. 1982. "External Conflict/Internal Cohesion: A Reevaluation of an Old Theory." *American Sociological Review* 47 (1): 88–98.
- McClosky, Herbert. 1964. "Consensus and Ideology in American Politics." *The American Political Science Review* 58 (2): 361–82.
- McCormick, James M., and Michael Black. 1983. "Ideology and Senate Voting on the Panama Canal Treaties." *Legislative Studies Quarterly* 8 (1): 45–63.
- Mildenberger, Matto, and Dustin Tingley. 2019. "Beliefs about Climate Beliefs: The Importance of Second-Order Opinions for Climate Politics." *British Journal of Political Science* 49 (4): 1279–1307.
- Miller, Laura L. 1999. "From Adversaries to Allies: Relief Workers' Attitudes Toward the US Military." *Qualitative Sociology* 22 (3): 181–97.
- Milner, Helen V., and Dustin Tingley. 2013. "The Choice for Multilateralism: Foreign Aid and American Foreign Policy." *The Review of International Organizations* 8 (3): 313–41.
- Milner, Helen V., and Dustin H. Tingley. 2010. "The Political Economy of U.s. Foreign Aid: American Legislators and the Domestic Politics of Aid." *Economics & Politics* 22 (2): 200–232.
- Mintz, Alex, Steven B. Redd, and Arnold Vedlitz. 2006. "Can We Generalize from Student Experiments to the Real World in Political Science, Military Affairs, and International Relations?" *Journal of Conflict Resolution* 50 (5): 757–76.

- Mockaitis, Thomas. 2003. "Winning Hearts and Minds in the 'War on Terrorism.'" *Small Wars & Insurgencies* 14 (1): 21–38.
- Morgenthau, Hans. 1962. "A Political Theory of Foreign Aid." *The American Political Science Review* 56 (2): 301–9.
- Morin-Chassé, Alexandre. 2018. "How to Survey About Electoral Turnout? Additional Evidence." *Journal of Experimental Political Science* 5 (3): 230–33.
- Mutz, Diana C. 2007. *Political Psychology and Choice*. Oxford University Press.
- Nanto, Dick K, and Mark E Manyin. 2010. "The Kaesong North-South Korean Industrial Complex," 23.
- Nincic, Miroslav. 2006. "The Logic of Positive Engagement: Dealing with Renegade Regimes." *International Studies Perspectives* 7 (4): 321–41.
- — —. 2010. "Getting What You Want: Positive Inducements in International Relations." *International Security* 35 (1): 138–83.
- — —. 2011. "The Logic of Positive Engagement by Miroslav Nincic | Hardcover." *Cornell University Press* (blog). 2011. <https://www.cornellpress.cornell.edu/book/9780801450068/the-logic-of-positive-engagement/>.
- Osgood, Charles E. 1962. *An Alternative to War or Surrender*. An Alternative to War or Surrender. Oxford, England: Univer. Illinois Press.
- O'Sullivan, Richard N. Haass and Meghan L. 2001. "Honey and Vinegar." *Brookings* (blog). 2001. <https://www.brookings.edu/book/honey-and-vinegar/>.
- Page, Benjamin I., and Jason Barabas. 2000. "Foreign Policy Gaps between Citizens and Leaders." *International Studies Quarterly* 44 (3): 339–64.
- Page, Benjamin I., and Robert Y. Shapiro. 1983. "Effects of Public Opinion on Policy." *American Political Science Review* 77 (1): 175–90.
- Page, Benjamin, and Robert Shapiro. 1992. *The Rational Public*. <https://press.uchicago.edu/ucp/books/book/chicago/R/bo3762628.html>.

- Pape, Robert A. 1997. "Why Economic Sanctions Do Not Work." *International Security* 22 (2): 90–136.
- Parry, Hugh J., and Helen M. Crossley. 1950. "Validity of Responses to Survey Questions." *Public Opinion Quarterly* 14 (1): 61–80.
- Pauly, Reid B. C. 2019. "'Stop or I'll Shoot, Comply and I Won't' : Coercive Assurance in International Politics/." Thesis, Massachusetts Institute of Technology.
- Peace, Roger. 2010. "Winning Hearts and Minds: The Debate Over U.S. Intervention in Nicaragua in the 1980s." *Peace & Change* 35 (1): 1–38.
- Pedaliu, Effie G. H. 2007. "Human Rights and Foreign Policy: Wilson and the Greek Dictators, 1967–1970." *Diplomacy & Statecraft* 18 (1): 185–214.
- Pepper, Alexander, and Julie Gore. 2014. "The Economic Psychology of Incentives: An International Study of Top Managers." *Journal of World Business* 49 (3): 350–61.
- Prendergast, Canice. 1999. "The Provision of Incentives in Firms." *Journal of Economic Literature* 37 (1): 7–63.
- Pritchard, Kathleen. 1991. "Human Rights: A Decent Respect for Public Opinion." *Human Rights Quarterly* 13: 123.
- Rai, Kul B. 1980. "Foreign Aid and Voting in the UN General Assembly, 1967–1976." *Journal of Peace Research* 17 (3): 269–77.
- Rathbun, Brian C. 2007. "Hierarchy and Community at Home and Abroad: Evidence of a Common Structure of Domestic and Foreign Policy Beliefs in American Elites." *Journal of Conflict Resolution* 51 (3): 379–407.
- Ripberger, Joseph T., Hank C. Jenkins-Smith, and Kerry G. Herron. 2011. "How Cultural Orientations Create Shifting National Security Coalitions on Nuclear Weapons and Terrorist Threats in the American Public." *PS: Political Science and Politics* 44 (4): 715–19.
- Risse-Kappen, Thomas. 1991. "Public Opinion, Domestic Structure, and Foreign Policy in Liberal Democracies." *World Politics* 43 (4): 479–512.

- Rudloff, Peter, James M Scott, and Tyra Blew. 2013. "Countering Adversaries and Cultivating Friends: Indirect Rivalry Factors and the Allocation of US Foreign Aid." *Cooperation and Conflict* 48 (3): 401–23.
- Ruff, Christian C., and Ernst Fehr. 2014. "The Neurobiology of Rewards and Values in Social Decision Making." *Nature Reviews. Neuroscience* 15 (8): 549–62.
- Ruiz, Jeanette B., and Robert A. Bell. 2021. "Predictors of Intention to Vaccinate against COVID-19: Results of a Nationwide Survey." *Vaccine* 39 (7): 1080–86.
- Ruloff, Dieter, and Thomas Bernauer. 1999. *The Politics of Positive Incentives in Arms Control*. University of South Carolina Press.
- Ryan, Timothy. 2018. "Data Contamination on MTurk | Timothy J. Ryan." August 12, 2018. <https://timryan.web.unc.edu/2018/08/12/data-contamination-on-mturk/>.
- Saeki, Manabu. 2013. "The Myth of the Elite Cue: Influence of Voters' Preferences on the US Congress." *Public Opinion Quarterly* 77 (3): 755–82.
- Samuelson, William, and Richard Zeckhauser. 1988. "Status Quo Bias in Decision Making." *Journal of Risk and Uncertainty* 1 (1): 7–59.
- Schraeder, Peter J., Steven W. Hook, and Bruce Taylor. 1998. "Clarifying the Foreign Aid Puzzle: A Comparison of American, Japanese, French, and Swedish Aid Flows." *World Politics* 50 (2): 294–323.
- Sheffer, Lior, Peter John Loewen, Stuart Soroka, Stefaan Walgrave, and Tamir Sheafer. 2018. "Nonrepresentative Representatives: An Experimental Study of the Decision Making of Elected Politicians." *American Political Science Review* 112 (2): 302–21.
- Shen, Dingli. 2008. "Can Sanctions Stop Proliferation?" *The Washington Quarterly* 31 (3): 89–100.
- Si, Steven X., and John B. Cullen. 1998. "RESPONSE CATEGORIES AND POTENTIAL CULTURAL BIAS: EFFECTS OF AN EXPLICIT MIDDLE POINT IN CROSS-CULTURAL SURVEYS." *The International Journal of Organizational Analysis* 6 (3): 218–30.

- Sibicky, Mark, and John F. Dovidio. 1986. "Stigma of Psychological Therapy: Stereotypes, Interpersonal Reactions, and the Self-Fulfilling Prophecy." *Journal of Counseling Psychology* 33 (2): 148–54.
- Simmel, Georg. 1955. "A Contribution to the Sociology of Religion." *American Journal of Sociology* 60 (S6): 1–18. <https://doi.org/10.1086/221650>.
- Smith, Vernon L., and James M. Walker. 1993. "Monetary Rewards and Decision Cost in Experimental Economics." *Economic Inquiry* 31 (2): 245–61.
- Smith, William R. 1993. "Country-of-Origin Bias: A Regional Labelling Solution." *International Marketing Review* 10 (6).
- Snyder, Scott. 2012. "North Korea's Growing Trade Dependency on China: Mixed Strategic Implications." *Council on Foreign Relations* (blog). 2012. <https://www.cfr.org/blog/north-koreas-growing-trade-dependency-china-mixed-strategic-implications>.
- Solingen, Etel, ed. 2012. *Sanctions, Statecraft, and Nuclear Proliferation*.
- Steenbergen, Marco R., Erica E. Edwards, and Catherine E. de Vries. 2007. "Who's Cueing Whom?: Mass-Elite Linkages and the Future of European Integration." *European Union Politics* 8 (1): 13–35.
- Stein, Arthur A. 1976. "Conflict and Cohesion: A Review of the Literature." *The Journal of Conflict Resolution* 20 (1): 143–72.
- Stocké, Volker, and Christian Hunkler. 2007. "Measures of Desirability Beliefs and Their Validity as Indicators for Socially Desirable Responding." *Field Methods* 19 (3): 313–36.
- Stone, Arthur A., Christine A. Bachrach, Jared B. Jobe, Howard S. Kurtzman, and Virginia S. Cain. 1999. *The Science of Self-Report: Implications for Research and Practice*. Psychology Press.
- Thaler, Richard. 1980. "Toward a Positive Theory of Consumer Choice." *Journal of Economic Behavior & Organization* 1 (1): 39–60.

- Thorndike, Edward L. 1898. "Animal Intelligence: An Experimental Study of the Associative Processes in Animals." *The Psychological Review: Monograph Supplements* 2 (4): i–109.
- Tokdemir, Efe. 2017. "Winning Hearts & Minds (!): The Dilemma of Foreign Aid in Anti-Americanism." *Journal of Peace Research* 54 (6): 819–32.
- Vreeland, James Raymond, and Axel Dreher. 2014. *The Political Economy of the United Nations Security Council: Money and Influence*. Cambridge University Press.
- Waldmann, Michael R., Jonas Nagel, and Alex Wiegmann. 2012. "Moral Judgment." In *The Oxford Handbook of Thinking and Reasoning*, 364–89. Oxford Library of Psychology. New York, NY, US: Oxford University Press.
- Wallace, Geoffrey P.R. 2013. "International Law and Public Attitudes Toward Torture: An Experimental Study." *International Organization* 67 (1): 105–40.
- Woon, Jonathan. 2012. "Democratic Accountability and Retrospective Voting: A Laboratory Experiment: DEMOCRATIC ACCOUNTABILITY." *American Journal of Political Science* 56 (4): 913–30.
- Wright, Quincy. 1955. *The Study of International Relations*. Appleton-Century-Crofts.
- Yarhi-Milo, Keren, Alexander Lanoszka, and Zack Cooper. 2016. "To Arm or to Ally? The Patron's Dilemma and the Strategic Logic of Arms Transfers and Alliances." *International Security* 41 (2): 90–139.
- Zaller, John R., and Zaller John R. 1992. *The Nature and Origins of Mass Opinion*. Cambridge University Press.

## Biography

So Jin Lee is a Ph.D. candidate in Political Science at Duke University, a Predoctoral Fellow at Johns Hopkins University-School of Advanced Studies' Kissinger Center, and a Hans J. Morgenthau Fellow at the University of Notre Dame's International Security Center. At Duke, she was an American Grand Strategy (AGS) Predoctoral Fellow (2019-2020) and a Graduate Fellow (2016-2019).

Prior to Duke, she worked as a Researcher for the Political Section at the Embassy of the Republic of Korea in Washington, D.C. She received a M.A. in Political Science from Duke University in 2021, an M.A. in Asian Studies from Georgetown University's Walsh School of Foreign Service in 2014, and a B.A. (*cum laude*) in Politics from Mount Holyoke College in 2013. Starting September 2021, she will be a Grand Strategy, Security, and Statecraft Postdoctoral Fellow at the Harvard Kennedy School's Belfer Center and Massachusetts Institute of Technology's Security Studies Program.