Does Cooperation with Neighboring Countries Matter?*

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In general, international issues are less salient than domestic issues to the public, but the diversionary theory and the rally-'round-the-flag effect explain that some types of conflictual external events can be salient enough to capture the public's attention, which leads to the public's support for the leaders. Although the conflictual external events are the part of a relationship, those are not equal to the relationship. In this context, I examine the effect of net cooperation on approval ratings considering all types of events from the most conflictual events to the most cooperative events. The event data are drawn from the Temporally Extended, Regular, Reproducible International Event Records (TERRIER) Project and each event is weighted by the Goldstein score. As for the approval ratings, I focus on the Japanese cabinet approval ratings from February 1986 to July 2017, and the South Korean presidential approval ratings from March 1993 to September 2016. Since there could be an endogeneity problem, I conduct the Granger Causality test and IRFs using a VAR model, and set a single equation based on the result. Considering the dynamics within the variables, I use an autoregressive distributed lag (ADL) model including the lagged values of the variables. The result shows that the net cooperation of Japan-China negatively affect the Japanese approval ratings, and that of South Korea-Japan also negatively influence the South Korean approval ratings.

Keywords: these, always seem silly, to me, given google, but regardless

Introduction

Does cooperative behavior toward neighboring countries affect domestic politics? Actually, many scholars focus on the effect of conflictual event on domestic politics. For example, diversionary theory explains that leaders are more likely to use force against other countries when they have domestic turmoil such as low economic growth. The point is that when a state has external conflict the leaders can get a better position in the domestic politics by distracting the public's attention from domestic issues toward external conflict. Similarly, the rally-'round-the-flag effect focuses on the public's tendency to support its government when it has an external threat. For instance, in July 2017, the lowest Japanese cabinet's approval rating was reported in the Yomiuri Shimbun, 36%.[1] The reason for the rapid decrease in the approval rating is the Japanese prime minister, Shinzo Abe's domestic scandals. Even though his efforts to end the scandals were not successful, his cabinet approval rating recovered the following month because of North Korea's series of missile tests and China's assertive attitude in the East China Sea. The rally effect is not limited to the severe threat. When the former Korean President, Lee Myung-bak, visited a disputed island between South Korea and Japan in 2012, his approval ratings increased about 9 percent (GallupKorea 2012).

Likewise, each state has ongoing conflict issues. Japan and South Korea have a disputed island and Japan has a maritime dispute with China, and both Japan and South Korea feel threatened by North Korea. Of course, those ongoing conflicts influence domestic politics, particularly, the president or prime minister's approval ratings. However, focusing on the conflicts is not enough

*The paper's revision history and the materials needed to reproduce its analyses can be found on Github here. Corresponding author: bomi-lee-1@uiowa.edu. Current version: April 09, 2019.

[1] Yomiuri poll was conducted on 7-9 July. More details can be seen on the following link (http://www.yomiuri.co.jp/election/poll/20170710-OYT8T50024.html).

to explain the effect of external relationships on domestic politics. Admittedly, the militarized disputes are so dramatic that the public is more likely to respond to them, the public also responds to cooperative events, such as signing an agreement or a summit. Furthermore, when the disputed countries are neighbors, discrete periods of conflicts cannot capture the characteristic of the interactions among them. For instance, despite the conflictual events, the disputants possibly meet each other to manage the conflict, or the disputants may have cooperative events in various areas.

In this regard, I focus on not just conflictual events but cooperative events and their effect on domestic politics of disputed neighboring countries. ln general, international issues are not salient enough to capture the public's attention except for interstate wars which probably generate casualties. However, when a state has one or more than one neighboring state sharing ongoing disputed issues, the public is more likely to pay attention to the international issues. Moreover, citizens of the disputed countries are more likely to care about not just the ongoing conflicts but the cooperative behaviors from or toward the disputed state. For this reason, I claim that a relationship between neighboring states needs to be considered as a continuous one based on both conflictual and cooperative events. In order to capture the relationships among the neighboring states, I use a machine-coded event data set from the Temporally Extended, Regular, Reproducible International Event Records (TERRIER) Project. This event data set includes the Goldstein score, scaled from the most conflictual event (-10), to the most cooperative event (+10). Since the scale contains cooperative scores, it can better represent the ongoing relations between disputed countries.

In this paper, I examine the effect of the external relations on approval ratings in Japan and South Korea respectively. I take these two cases, because firstly, both have ongoing conflicts with neighboring states such as territorial disputes and nuclear threats from North Korea, and secondly, the significant range of the presidential or cabinet approval ratings are available. The Japanese cabinet approval ratings are from February 1986 to July 2017 and the South Korean presidential approval ratings are from March 1993 to September 2016. The Japanese cabinet approval ratings are drawn from the Yomiuri Shimbun, which conducted polls monthly. And the South Korean presidential approval ratings are taken from the Research & Research. As for the external relations of Japan, I focus on three neighboring countries, China, South Korea, and North Korea. Indeed, China and South Korea similarly have disputed islands with Japan—the Senkaku/Diaoyu islands in the East China Sea and the Liancourt Rocks (referred to as Takeshima in Japan, and Dokdo in South Korea). North Korea has been a severe threat to Japan because of their missile launches and nuclear experiments and, on the other hand, North Korea's abduction of Japanese citizens is still an ongoing problem between Japan and North Korea. As for South Korea, I focus on the relationships with two neighboring states, Japan and North Korea. South Korea has the disputed area with Japan as mentioned above, and both Koreas have had continuous conflictual events in the aftermath of the Korean War.

The specific questions in this paper are as follows: do external relations with neighboring states affect approval ratings? Specifically, do cooperative behaviors matter? If the overall relations matter, then which neighboring states are more important in the change of approval ratings? In this paper, I contend that not just conflictual behaviors but also cooperative behaviors affect the approval ratings. In terms of the significance of the effect, I expect that relations with rival countries have more impact on the approval. Of course, rivalry can be defined in various ways, but in this paper, I focus on the citizens' perception of rivalry. In this way, the rivalry is not necessarily reciprocal. Even though South Korean people think of Japan as their rival, Japanese people may not consider South Korea in the same way. I expect that Japanese citizens are more likely to respond to the relationship with China compared to those with South Korea and North Korea, and South Korean citizens are more likely to respond to the South Korean-Japanese relations rather than the two Korean relations.

This paper proceeds as follows. First, I present arguments in terms of the relationship between external relations and approval focusing on the diversionary theory and the rally effect. Second, I argue that the overall relations with neighboring countries affect the approval, particularly, when the counterpart is considered a rival. Before I suggest a model, I examine the direction of the relationship among the variables since there could be an endogeneity problem. Thus, to examine the direction of the relationship I conduct the Granger Causality test using a vector autoregression (VAR) model. After checking the direction of the effect, I present a single equation model focusing on the approval, conduct a linear regression model including lagged independent and dependent variables, and discuss the results.

The Effect of Conflict and Cooperation on Domestic Politics

External Relations and Approval

There are many studies about public approval, specifically, the factors affecting approval ratings. Ostrom and Smith (1992) examine the effects of quality-of-life outcomes, extraordinary events, and ordinary events on the approval focusing on the US presidential approval ratings. They argue that there is an equilibrium between the approval and the quality-of-life outcomes such as unemployment rate and inflation. Thus, when a critical change occurs in the unemployment rate or inflation, the approval rating adjusts following the change. They also argue that extraordinary political events can affect the equilibrium unlike ordinary events. According to their argument, the effects of ordinary events are conditional and do not last long while those of extraordinary events change the overall equilibrium of approval. In their study, the assassination attempt on President Reagan, and the Iran-Contra scandal are coded as extraordinary events (Ostrom and Smith 1992). Ostrom and Smith contribute to the understanding of the dynamics in US presidential approval by distinguishing the effects of extraordinary and ordinary events. However, more studies are necessary regarding what kind of events or actions affect the approval.

Diversionary Use of Force and Rally-'Round-the-Flag Effect

Many scholars focus on conflictual events to explain the relationships between international relations and domestic politics. First, diversionary theory points out the effect of lower popularity or lower approval on the use of force. According to the diversionary theory, when leaders suffer from domestic turmoil, they are more likely to use force toward other countries to distract the public's attention from domestic issues and toward external conflict. For instance, Oneal and Tir (2006) explain whether economic turmoil such as low economic growth affects the probability of interstate conflict. On the other hand, some scholars focus on the effect of external conflict on approval ratings, especially the rally-round-the-flag effect. When a country is involved in an international crisis, the public is more likely to support the government, thus, the approval ratings will increase.

In fact, the directions between external conflict and approval are different in the diversionary theory and the rally effect. For the diversionary theory, the direction is from approval to external conflict whereas the direction in the rally effect is from external conflict to approval. Even though they have different focuses, they can be combined depending on the initiator of the crisis. First, suppose that State A suffers from domestic turmoil and lower approval. If a leader of State A initiates an external crisis toward State B, and that leads to an increase of the leader's approval, then the directions of external conflict and approval can be described as follows: Approval (A) $\rightarrow$ External Conflict (A to B) $\rightarrow$ Approval (A). On the other hand, regardless of the approval in State A, State B can initiate the conflict with State A, and which can affect A's approval as such:

External Conflict (B to A) → Approval (A). The probable endogeneity problem will be discussed at the next part.

In the Context of Rivalry

Regarding the rally effect, some scholars suggest more specific conditions which can influence the rally effect. For instance, Mitchell and Prins (2004) point out rivalry among countries. In their study, they explain that diversionary behavior is more likely to be observed among rival countries since those countries having a rival counterpart possess more opportunities for diversionary uses of force which can facilitate a rally effect (Mitchell and Prins 2004).

Apart from the diversionary theory and the rally effect, Colaresi (2004) focuses on the effect of cooperation on the leadership turnover in the context of rivalry. Specifically, Colaresi argues that when leaders overcooperate with rival countries, they are more likely to be removed due to the loss of the public's support. For that reason, in the rivalry dyads, leaders are more likely to take the hawkish way to stay in office (Colaresi 2004). Both studies imply that the effect of conflict or cooperation can vary depending on the rivalry condition.

Considering the rivalry condition, I contend that conflict or cooperation with neighboring countries affect approval ratings more in the context of rivalry. When the counterpart is a rival, and the public perceive the country as a rival, then the cooperative events may lead to lower approval ratings. Of course, Colaresi (2004) uses specific words—overcooperartion—but in this paper, I focus on the general cooperation. Indeed, in the rivalry context, the public may think any cooperative behavior would be overcooperartion. This leads to my hypothesis below:

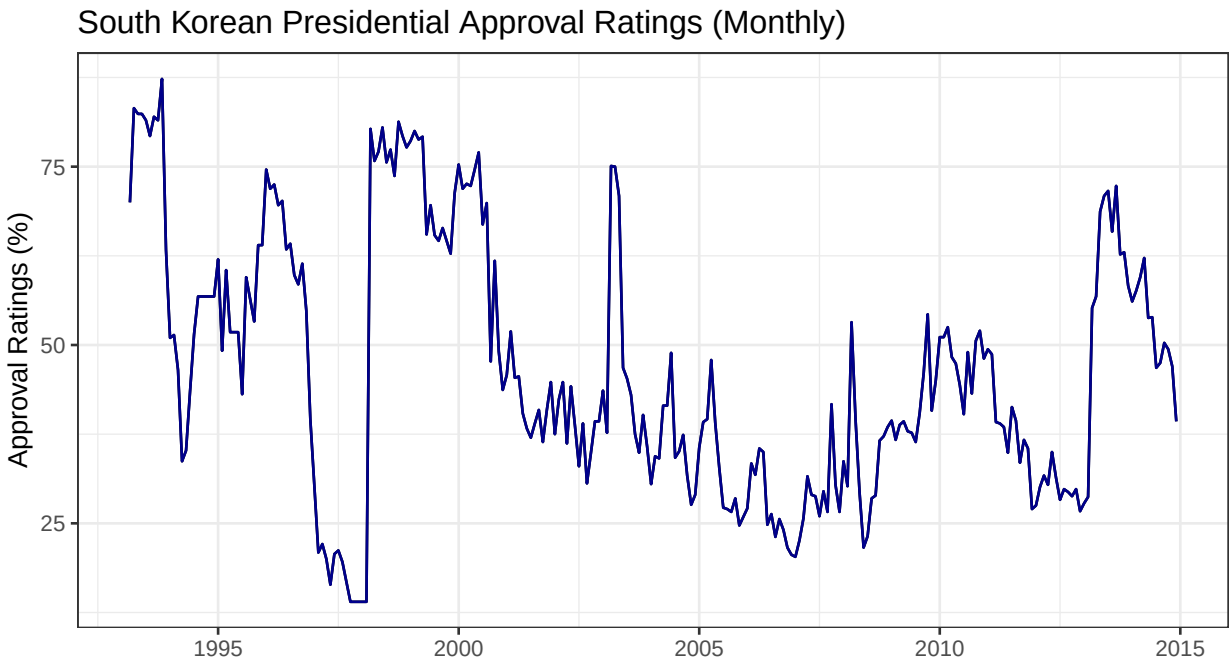
> Hypothesis 1: Cooperative behaviors are more likely to negatively affect approval ratings when the counterpart is a rival.

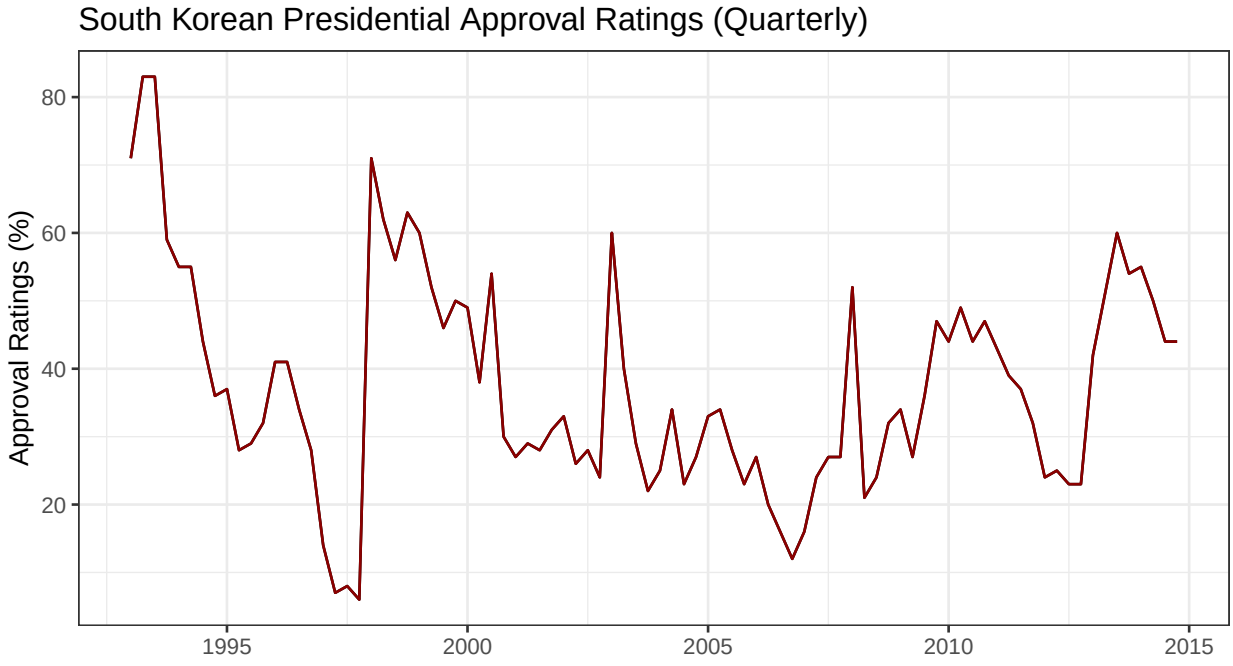
Research Design

Since I focus on two cases, Japan and South Korea, I set a model for each case. The first dependent variable is Japanese cabinet approval ratings which are measured by the Yomiuri Shimbun survey. The Yomiuri Shimbun has conducted this monthly survey, and the survey question is: Do you support the current cabinet or not. The results of the poll can be found at the Yomiuri Shimbun database.[2] I use the cabinet approval ratings of the regular survey from February 1987 to July 2017. The total time points are 378 months, and 16 points are missing. Half of the missing values are generated because of the transition of the cabinet. In the last month of the cabinet, and just before the election, the question of cabinet support was not included in the survey. Since time series analysis is sensitive to the missing values, I use the previous approval rating for the missing value.

As for the South Korean presidential approval ratings, they are drawn from the Research & Research. This is a quarterly approval rating and the range of the approval ratings are from 1993 to 2014, thus the total number of observations is 88.

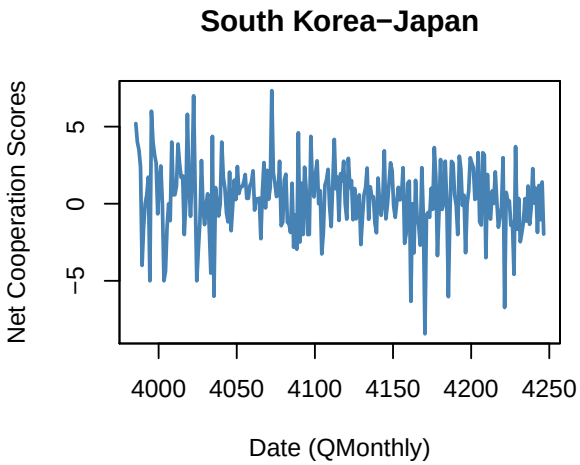
[2] https://database.yomiuri.co.jp/rekishikan/

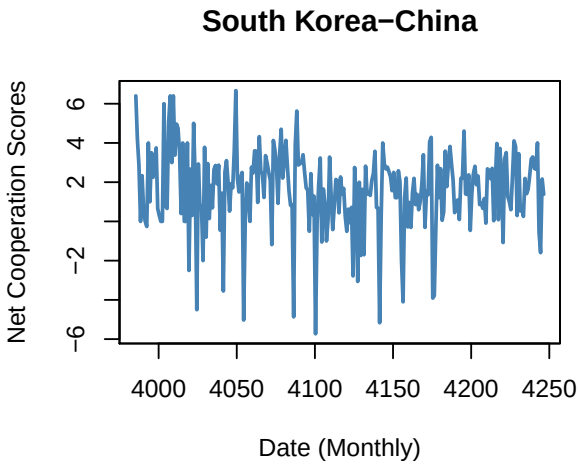


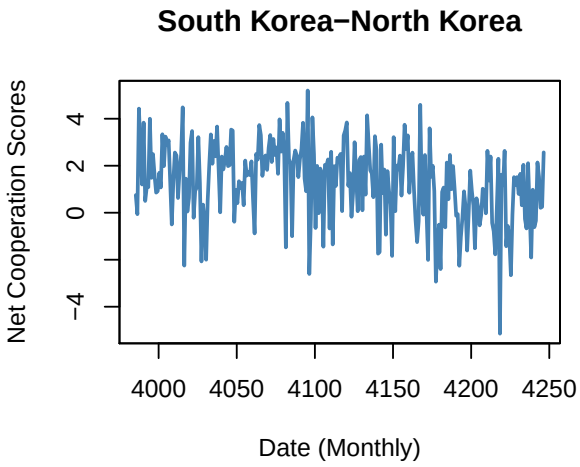


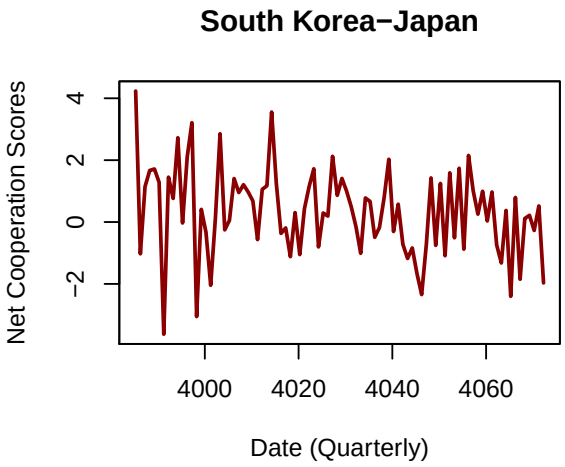
The core independent variables are net cooperation scores of the dyads. The scores of net cooperation are taken from the TERRIER dataset. The TERRIER dataset is one of the machine-coded datasets where news reports of events are coded using the dyadic Conflict and Mediation Event Observations Event and Actor Codebook (CAMEO) format. For instance, when one piece of news is reported, then the event is coded following the CAMEO code, and Actor 1 and Actor 2 are specified where Actor 1 is a sender and Actor 2 is a target. Additionally, TERRIER includes the Goldstein score, thus each event is scaled from the most conflictual event (-10) to the most cooperative event (+10). This Goldstein scale was created and introduced by Goldstein (1992), and

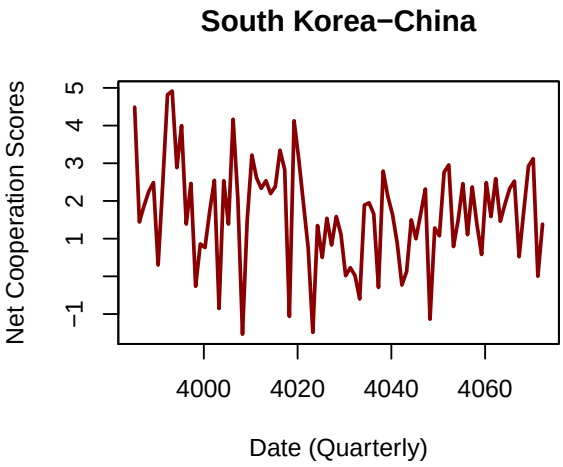
using the scale, each event can be weighted differently. For instance, when the news is reported, the event is coded following the CAMEO codes, and each CAMEO code is assigned the Goldstein score, thus each event can be weighted in the spectrum of cooperation and conflict. I use the mean of the weighted events during the month as the net cooperation score. This net cooperation score is used in Lebo and Moore (2003) and Rajmaira (1997) as well. Also, I use directed net cooperation scores considering all events related to the dyad. Thus, for the Japanese case, I include 3 dyads, Japan-China, Japan-South Korea, and Japan-North Korea. For the Korean case, I consider 3 dyads, South Korea-Japan, South Korea-China, and South Korea-North Korea. Below are the net cooperation scores of the dyads from the given period.

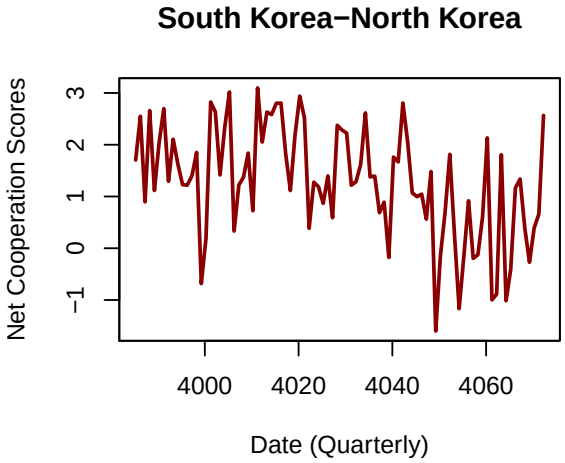












As for the rivalry relationship, firstly, I consider the five levels of a relationship from Goertz, Diehl and Balas (2016). More specifically, they develop five levels of a peace scale—severe rivalry, lesser rivalry, negative peace, warm peace, and security communities considering the existence of conflict, war plans, main issues of conflict, communication, diplomacy, and agreement. In their data set, the relationship between Japan and North Korea was a lesser rivalry from 1986 to 1994 but it changed to a severe rivalry in 1994. The relationship between Japan and South Korea is a lesser rivalry in the given period, and that of Japan and China is also a lesser rivalry during the period. On the other hand, the relationship between South Korea and North Korea is a severe rivalry since both states were created. Thus, both Japan and South Korea have a severe rivalry relationship with North Korea and other dyads are in the lesser rivalry level according to the peace scale data.

However, it is difficult to expect that North Korea is perceived as a rival to both states. As Thompson (2002) points out, the rivalry relationship is not just related to the number of militarized disputes but to the threat perception and hostility. Even though he focuses on the decision maker's perception of rivalry, the change of public approval is closely related to the public's threat perception. According to the Yomiuri and Gallup Joint Opinion Survey data, the respondents who answer that China is a military threat to Japan have increased over time (54.5 % in 2006, 79% in 2010, and 83% in 2014). On the other hand, the percentages of the respondents answering that

North Korea is a military threat to Japan have maintained over time (79.6% in 2006, 84% in 2010, and 71% in 2014). Contrary to that, South Korea has obtained the lower percentages during the given period (24.4% in 2006, 18% in 2010, and 41% in 2014). Although the peace scale data show the different levels of the relationship for the Japan-China, and the Japan-North Korea dyads, the threat perceptions of the Japanese citizens toward China and North Korea are not significantly different. On the other hand, the survey results conducted by Korea Gallup show that 31.3% of the respondents answer that Japan is a military threat to South Korea in 2001. This value is slightly higher than the percentage of North Korea (29.7%). Another survey carried out by Korea Institute for Defense Analysis reports that 23.6% of the respondents say that Japan is a military threat to South Korea, which is the second highest rank. In the survey, China records the first rank by 37.7%, and North Korea is the 3rd rank by 20.7%. Since the Japanese citizens consider both China and North Korea as military threats, and the South Korean citizens perceive both North Korea and Japan as military threats, those threat perceptions should be considered for the understanding of the rivalry relationship.

For the control variables, I take the Ostrom and Smith (1992) model, thus I include unemployment rate and inflation. Both data are taken from the Organization for Economic Co-operation and Development (OECD) database. The unemployment rate is the percentage of the unemployed people among the labor forces. I use the consumer price index (CPI) for inflation.[3] Adding to those variables, I include a new cabinet or new president variable for each model, coded 1 for a new cabinet/president and 0 otherwise. Since there is a tendency for a new cabinet/president to get more support in the first month, thus I consider the effect as a control variable.

Direction of the Relationship between External Relations and Approval

As stated above, there could be an endogeneity problem within the variables. External relations regardless of cooperation and conflict can affect the approval, but at the same time, the approval ratings can affect the external relations like the following equations.

$$Approval_t = \sum_{i=1}^{p} \alpha_i Approval_{t-1} + \sum_{j=0}^{q} \sum_{k=1}^{r} \beta_{jk} NetCooperation_{t-j} + \epsilon_{1t}$$

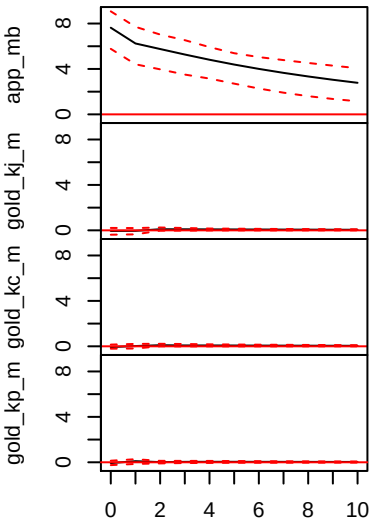
$$NetCooperation_t = \sum_{l=0}^{s} \sum_{m=1}^{t} \delta_{lm} NetCooperation_{t-1} + \sum_{n=0}^{u} \gamma_n Approval_{t-n} + \epsilon_{2t}$$

Thus, in order to figure out the direction of the relationship I conduct the Granger Causality test using a vector autoregression (VAR) model.

In the first model of the Japanese case, the result of Granger Causality test shows that the direction of the relationship flows from Japan-China relations to approval ratings. The Granger causality test is an equation where y is regressed on a lagged value or values of y and a lagged value or values of x. The null hypothesis is that x does not "Granger cause" y (Box-Steffensmeier, Darmofal and Farrell 2009).

[3] More details can be found on the OECD database (https://data.oecd.org/unemp/unemployment-rate.htm; https://data.oecd.org/price/inflation-cpi.htm).

Orthogonal Impulse Response from app_mb



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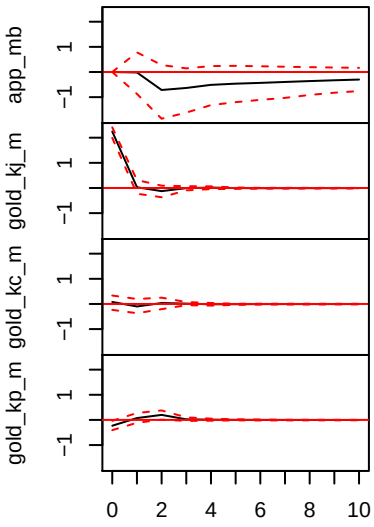

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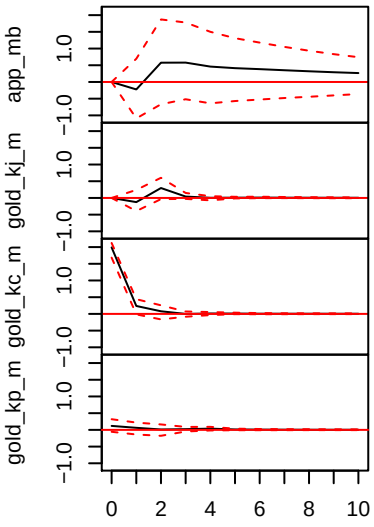

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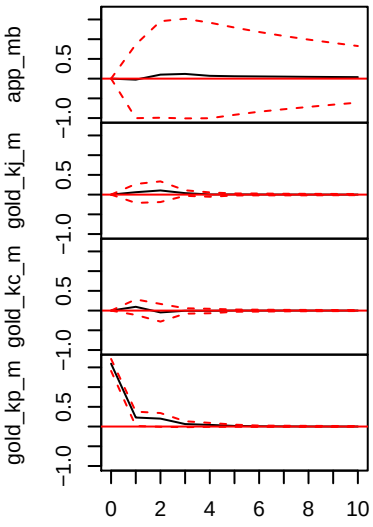

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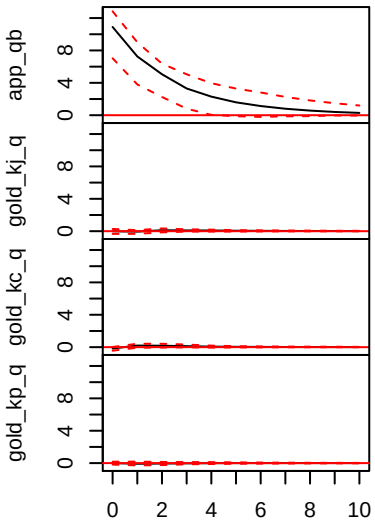

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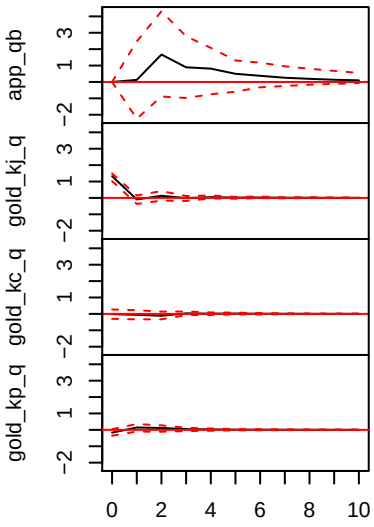

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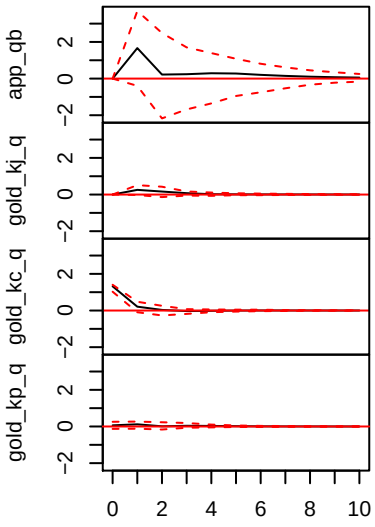

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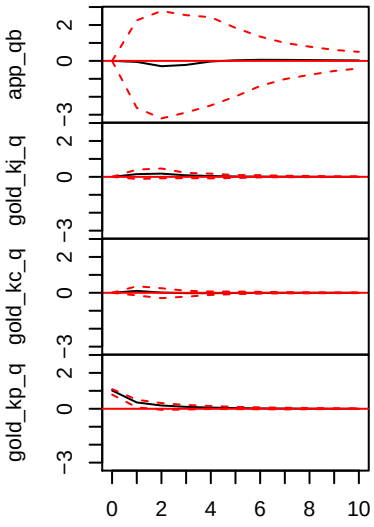

95 % Bootstrap CI, 100 runs

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