IS IT ALL ABOUT A RATIONAL DUEL? A CRITIQUE OF BARGAINING MODEL OF WAR

Sevinç ÖZTÜRK^{*}

Abstract

The bargaining model has emerged as a progressive, analytic, and persuasive explanation of war; yet, it has some limitations and weaknesses that need improvement. In this study, the potential strength and weaknesses of the bargaining model of war, as well as its applications are discussed. More specifically, this paper reviews the emergence, causal mechanisms, and modifications of the bargaining model of war by concentrating on its up-to-date applications to war. This paper argues that bargaining model gives us a conspicuous explanation concerning the war, even though the theory suffers from some deficits; particularly on the logic of its mechanism, the problem of disagreement, uncertainty, "take it or leave it" protocol, rationality and risk aversion of the actor. The bargaining model of war is still progressing; nonetheless, these problems allow us to have a persuasive but limited and even partially misleading explanation of war. Benefiting from the psychological and domestic explanations of war, the explanatory power of the theory might be enhanced.

Keywords: Bargaining, War, Incomplete Information, Commitment Problem, Conflict

SAVAŞ RASYONEL BİR DÜELLODAN MI İBARETTİR? SAVAŞIN PAZARLIK MODELİ'NE BİR ELEŞTİRİ

Özet

Pazarlık Modeli her ne kadar son yıllarda uluslararası ilişkiler ve savaş literatüründe ilerlemeci, analitik ve ikna edici bir açıklama sağlasa da modelin bazı eksiklikleri ve zayıflıkları bulunmaktadır. Bu çalışmada, Savaşın Pazarlık Modeli'nin ve onun uygulamalarının güçlü ve zayıf olduğu yönler tartışılacaktır. Çalışmada, özellikle, Savaşın Pazarlık Modeli'nin ortaya çıkışı, onun nedensellik mekanizması bu modelin güncel uygulamalarına odaklanarak örnekler üzerinden incelenmektedir. Bu incelemeye dayanarak bu çalışma, teorinin savaşın nedenleri konusunda önemli ölçüde açıklamalar yapmasına rağmen teorinin mekanizmalarının mantıksallığında, özellikle de uyuşmazlık problemi, belirsizlik, "ister kabul et, ister etme" protokolü, rasyonalite ve riskten kaçınma konularında bazı eksiklikleri olduğunu savunur. Savaşın Pazarlık Modeli savaşın nedenleri konusunda hala gelişmekte bir teori olmakla beraber, açıklamaları bize ikna edici, fakat aynı zamanda kısıtlı ve kısmen yanıltıcı bir nedensellik sunmaktadır. Savaşın nedenine yönelik psikolojik ve iç politikaya dayalı açıklamalardan da faydanlanmak, teorinin açıklayıcı gücünü daha da arttırabilecek ve yanıltıcı açıklamaların önüne geçebilecektir.

Anahtar kelimeler: Pazarlık, Savaş, Eksik Bilgi, Taahhüt Sorunu, Çatışma

^{*} Dr., Department of International Relations, Faculty of Economics and Administrative Sciences, Bitlis Eren University, Bitlis, Turkey, sevincozzturk@gmail.com, ORCID ID: 0000-0002-8227-6486

INTRODUCTION

"War is nothing but a duel on an extensive scale"

- Carl Von Clausewitz

The study of war and peace is still in the center of the discipline of International Relations. The causes of war and peace have been explained by various scholars with different approaches; yet, there is no entire consistency in the scholarly works in terms of the real causes of war. While neorealists argue that the anarchic structure of system leads states to war (Waltz, 2001; Fearon, 1995), the economic explanations of war emphasize the importance of trade and economic cooperation in the prevention of war (Doyle, 1997; Copeland, 2015; Oneal & Russett, 1999). On the other hand, democratic peace theory reveals that the regime types matter; expressly, democratic states do not go to war with each other (Levy & Thompson, 2010). Neorealist theories do not explain the variance of war over time and space as they are unable to predict the end of the Cold War. The economic explanation provides us the reason of peace, but not of war. Democratic peace theories correlate the regime type with war and peace but are not interested in the strategic interaction of the states. Another argument on the causes of war emerges as a game-theoretic approach to war and become dominant in the war research program in the last 25 years (McLaughin Mitchell, 2016): "the rational explanation of war or the bargaining model of war."

Strategic interactions of the states with the rational choice and game-theoretical explanations have been applied since the 1950s and have still been growing (Brown et al., 2000). The traditional neorealist idea only points out that anarchy leads to war because there is no supranational authority to enforce agreements between states. Nonetheless, not only war, but also negotiation and peace occur under the anarchy while there is no supranational authority that imposes states to follow the rules of agreements. For that reason, there must be another explanation of war, which can answer why states prefer war over negotiation settlements under anarchy (Brown et al., 2000). The bargaining model¹ attempts to answer this question which discusses the causes of war that occurs although war is costly, and that there should be a preferred negotiated settlement to war. The model, in

¹ Bargaining model of war is a model that explains the causes of war depending on the bargaining theory. However, bargaining theory, in general, is used to show the strategic interaction between any actors such as legislatures, political parties in the usage of political science. For more information about the usage of bargaining theory in political science, see McCarty and Meirowitz (2007).

general, focuses on the question of "why war is sometimes preferable over negotiation by the states?" (Fearon, 1995), but it also explains the prosecution, termination, and consequences of war. Methodologically, most of the implications of the bargaining model of war are based on the formal model analysis,² which is based on the idea of the conflict on the share of the sources. By analyzing the literature, this study seeks to answer to what extent the bargaining model of war is effective and applicable to explain the causes of war.

This study focuses on the explanations and applications of the bargaining model on analyzing the war. This paper argues that bargaining model of war gives a remarkable causal explanation of war, even though the theory suffers from some deficits; in particular, on the logic of its mechanism, the problem of disagreement, uncertainty, "take it or leave it" protocol, rationality and risk aversion of the actor.

These problems lead us to have a limited and misleading (even if persuasive) explanation of war while the bargaining model is still progressing. The main argument of the paper is that although the bargaining model is a progressive, persuasive and analytic way of explanation of the causes of war, its explanatory power might be enhanced by the integration of domestic, organizational (Reiter, 2003) and/or psychological models of foreign policy decision-making (Anderton, 2017).

This study has four main sections. Following this introduction, this paper will review the historical roots and emergence of the idea of war as a bargaining process as well as how the bargaining model of war has progressed over time. Then, this study will proceed with the general limitations and weaknesses of the theory along with the shortcomings in the explanation of its three main mechanisms: "incomplete information, problems of credible commitment, and indivisibility". Finally, the paper will conclude with the discussion of future research.

1. BARGAINING MODEL OF WAR

Bargaining Model is a model of rationalist explanation of war which views the essence of war as a conflict over resource allocation (Reiter, 2003), and discusses the causes of war that occur although it is costly (Levy & Thompson, 2010; Weisiger, 2013) and there must be a preferred negotiated settlement to war

 $^{^2}$ Using formal model analysis for this theory also sometimes restricts scholars from understanding the literature and applying the model in diverse cases because not all the scholars expertize in formal modelling (Reiter, 2003).

(Wagner, 2007). The idea of war as a bargaining instrument has rooted in Clausewitz (1976), modeled by Fearon (1995), and evolved by scholars such as Powell (2002), Wagner (2007), Smith and Stam (2004). Before explaining the evolvement of the model, it is essential to review the main assumptions of the model in historical order.

1.1. Historical Background of Bargaining Model of War

The bargaining model of war is known with Fearon (1995), but the root of the idea lies in Clausewitz (1976), Schelling (1960) and Blainey (1988). While Clausewitz and Schelling (1960) emphasize the bargaining process concerning war, Blainey's focus (1988) is on the disagreement about the relative power as a factor that leads to war. However, these ideas have been primarily modeled by Fearon (1995) who takes into consideration the structure of war as a costly action.

First of all, according to Clausewitz (1976), war is not an end itself; in fact, it is a political tool that is a part of bargaining and negotiating to accomplish political goals (p. 88);³ in other words, war is just "a political instrument and a continuation of policy" (p. 78-79). Also, Clausewitz (1976) distinguishes the war in practice (real war⁴), and the war in theory (absolute war⁵) and argues that the absolute war occurs when the negotiated settlements of war are possible. The absolute and real war division is formalized by Wagner (2000). In addition to Clausewitz and Wagner, Schelling (1960) also argues that "war is always a bargaining process" (p.142) by examining the end of World War II as a bargaining interaction rather than military interaction. While Schelling (1960) and Clausewitz (1976) agree that war is a bargaining process, Blainey (1988) explains the idea of mutual optimism about the distribution of power in the bargaining process.

Criticizing the balance of power theory, Blainey (1988) argues that to explain war, the real distribution of power is not important; the importance lies in leaders' anticipation regarding how power is distributed. He defines war as "a dispute about the measurement of power" (Blainey, 1988, p. 114). In other words, Blainey (1988) emphasizes the role of leader's subjective idea about his power as a cause of war.

³ Clausewitz (1976, p.88) defines war as "an act of force to compel our enemy to do our will" as he explains the aim of war is disarming the enemy.

⁴ Wagner (2000) defines real war as "a war in which states do not risk complete disarmament" (p. 472).

⁵ Wagner (2000) defines absolute war as "a contest in which each side tries to render his opponent defenseless by disarming him, in order to be able to use force against him afterwards without resistance" (p.472).

When states go to war, it is because each believes it can gain more by war than by negotiating.⁶ As a result, war emerges as a disagreement about the relative power of states and ends when fighting adversaries agree on their relative strength.

However, the idea of the disagreement about the relative power neglects a significant element of war: cost. Given that war is costly, and an unpleasant way of resolving the disputes, "why do states nonetheless go to war rather than pre-war bargaining and negotiating peacefully" (Fearon, 1995)? Three mechanisms can explain why wars are preferred to peaceful negotiation although they are costly, Fearon (1995) argues and models: incomplete information, problems of credible commitments, and indivisibilities over the issues (pp. 381-382).

1.2. The Progression of Research on the Bargaining Model of War with Its Modifications

The bargaining model of war has been modified by the scholars who applied the model to the civil wars, to the wars between more than two international actors, and applied by including the structure of domestic politics. The model is also used to understand not only the initialization of war, but also the duration, termination and consequences of it.

Regarding the termination of the war, "why a specific war takes so long and does not end" or "when do the wars end" (Filson & Werner, 2002, p. 819) are essential questions as well as "why war occurs" (Goemans, 2000, p. 3). Bargaining proceeds after the war starts. Therefore, employing the bargaining model, Wagner (2000) examines why wars occur, how long it continues, why it takes the form it does, and why it ends. Distinguishing the wars as absolute and real wars like Clausewitz (1976), and modelling them, Wagner (2000) argues that bargaining leads to real war (it happens as bargaining continues) and this leads to an absolute war (if bargaining fails).

According to Goemans (2000), a war can come to an end only when demands of each actor are no more than the other actor is willing to give. War begins when both of the adversaries have higher expected utility for going to war than the negotiation agreement. For termination of war, both sides have higher expected utility for negotiating than proceeding the war (Goemans, 2000). Moreover, to

⁶ When each actor believes that he will be the one who wins the war, then the probability of gaining increases. When each actor's probability increases, each actor believes the expected utility of each one's is larger. For that reason, the sum of expected utility is supposed to be more than 1, which cannot be possible, and the conflict occurs.

understand the causes of war, one should also consider the process of war (Smith & Stam, 2004). Smith and Stam (2004) argue that as the costs become higher, wars take a shorter time, which causes unstable post-war equilibria when compared to more prolonged wars, because long term wars reveal more information about the capabilities of the two sides.

One of the advantages of the bargaining model of war to explain the causes of war is its applicability to civil wars. Reiter (2010) applies the model to the American Civil War to answer the questions of "what were the determinants of war-termination dynamics during the conflict and did information dynamics of credible commitment concerns affect the intra-war negotiations?" (p.141). The American Civil War lasted until the Confederate Army was defeated entirely or the Union flew apart. Neither side was accepting the negotiation settlement. According to Reiter (2010), Lincoln feared that if the North gave in secession or granted secession, the South could not credibly commit not to make greater demands. On the other side, relying on their doubts about keeping promises of Lincoln, the Confederacy was also fearing that the Union could not even credibly commit to a theoretically acceptable settlement that removed Southern sovereignty. Each side finally agreed to consider making concessions on the critical issue of slavery. Although Reiter (2010) finds that information factors are not enough to explain the war termination, he also believes that the fear of credible commitment has a vital role in the South.

Another progression of the bargaining model appears as the interaction variable of its various mechanisms. While the theory originally offers three mechanisms (private information, commitment problem, indivisibility over the issues), the progress has been made by examining "how two bargaining problems (commitment problem due to the power shift and asymmetric information) interact, and what the consequences for understanding the role of intra-war events like combat and negotiation when both problems are present are?" (Wolford et al., 2011, p. 557).

Some progress has been made in the bargaining model of war by including more than two actors in its applications. Most of the applications of the bargaining model of war involve only two actors, which is unnatural because there are not only two states in the real world, but multilateral bargaining such as alliances, balancing and bandwagoning might change the bargaining capacity of the state, thanks to the third-party mediation (Powell, 2002). For instance, the alliances are important in the bargaining process because allying with a weaker state may put the states in a weaker bargaining position. Besides, foreign intervention changes the bargaining power of the influenced state in the civil war (Albornoz & Hauk, 2014); which occurs as a result of the commitment problem.

As mentioned, the bargaining model and its applications are highly useful in explaining the different phases of war with a noticeably persuasive explanation, and it is still in progress. However, the theory has some weaknesses and limitations that must be addressed.

2. THE LIMITATIONS AND WEAKNESSES OF THE BARGAINING MODEL OF WAR

The bargaining model of war is an extensively broad approach for the explanation of war, and its applications show us its ability to explain various types of war and different processes of war (initiation, duration, termination). However, it has some limitations in the explanation of some factors such as disagreement, uncertainty, take it or leave it protocol, rationality, and risk propensity of actors. Examining a state only as a unitary actor is another limitation. Moreover, while the model gives us strong "necessary causalities" for the war, these causalities are not sufficient conditions.

First, in the bargaining model of war, "take it or leave it protocol" seems to require improvement. As Powell (2002) argues, "take it or leave it" protocol is unnatural because, in most examples of the model, states receive the offer or go to war; however, in the real world, it is not practical because states usually make counter-offer, accept the offer or just wait. To simply put, states do not always have to attack or agree with the offer. In the recent applications of the bargaining model of war, the bargaining can be taken into consideration with its multi-stages. For example, one state offers, then the other state either goes to war, accepts the offer, or presents a counteroffer. In the second turn (if the second actor counter offers), the first state again either goes to war, makes a counteroffer, or accepts the offer. The recent application of the model must also include the continuation value of the states during bargaining. Moreover, although the "bargaining theory assumes that war is terminated once settlement is reached" (Lake, 2010, p. 8), conflict does not always end as soon as the settlement is reached. As seen in the Iraq War (2003), the conflict process proceeds despite the declaration of peace. This situation is called post-war peace by Lake (2010) and this additional stage of a conflict should be included into the bargaining model of war.

Second, the bargaining model is also known as a rationalist explanation of war, but the idea of rationality is generally controversial because there are psychological deviations from rationality. Actors do not always act as rational (McDermott, 2001). For example, Prospect Theory⁷ posits that individuals tend to act risk-averse while they are in a domain of gains, and they tend to behave risk-seeking while they are in a domain of loss (Kahneman and Tversky, 1979). However, bargaining model of war views the actors as risk-neutral, ignores the risk-acceptance of the actor, although the actors consider themselves that they are in the domain of gain in the model. On the other hand, commitment problem (which is one of the mechanisms of the bargaining model of war) usually occurs under the power shifts and "power shifts are more likely to lead to war as the challenger becomes more risk-acceptant" (Woosang & Morrow, 1992, p. 896). Therefore, it is essential to include risk-acceptance and risk-seeking behavior of the actors into the bargaining model of war. Moreover, the informational path to war includes both a psychological component (the sources of disagreements about relative power (Streich & Levy, 2016) and a rational component (the link between disagreements about relative power and war), but the theory neglects the psychological part and is called as a rational explanation. An example of the Iraq War illustrates the problem of rationality (Lake, 2010). According to Lake, the United States of America (US or USA) and Iraq were not entirely rational because the information failures between the US and Iraq were caused by cognitive biases in decision-making, not because of the misrepresentation of information or bluffing (Lake, 2010).

Finally, the bargaining model of war identifies the necessary conditions but not sufficient conditions within the rationalist framework, as Gartzke (1999) rightly criticizes. More specifically, the model and its modifications identify the causes of peace but not the war. When all of the counter-mechanisms of bargaining theory (information, credible commitment, divisibility) is present, peace will last; when one is absent, there might be war or peace (Gartzke, 1999). In other words, the lack of information, credible commitment, or divisibility over the issue alone do not automatically have to lead to war; "war does not always occur given uncertainty and incentives to bluff" (Gartzke, 1999, p.575), so these may form the necessary conditions for war, but not the sufficient conditions for war.

Given these limitations, the bargaining model of war should be improved by benefiting from the psychological decision-making theories, and it needs to avoid "analytic simplification" by including more than two actors into the model and the

⁷ Prospect theory is a theory of decision making under risky conditions (McDermott, 2001).

conflict in the post-war peace (Lake, 2010). Finally, the theory also needs to improve its explanation for sufficient causality.

2.1. Mechanisms of the Bargaining Model of War and Their Limitations

There are three main mechanisms of the bargaining theory of war: Incomplete information, problems of credible commitments, and indivisibility of the issues (Fearon,1995). Incomplete information has three features, which are "disagreement about the cost and victory", "problems of credibility", and "bluffing". Problems of credible commitment also arise because of the following three situations: "first strike advantageous", "bargaining over issues that affect for future power" and "the alteration of power". Indivisibility over the issues occurs when the issue is meaningful for the adversaries so that it cannot be divided. However, although these three mechanisms are highly persuasive, there are some insufficient and misleading explanations in their logics.

2.1.1. Incomplete Information

The mechanism of incomplete information in the bargaining model of war is persuasive but misleading due to its misspecification of the causality. According to Fearon's model, rational leaders have incentives to misrepresent information, concerning their power and capacity (1995). Leaders hide their weaknesses, exaggerate their capabilities to gain more during bargaining. This behavior of states, which is named as incomplete information, causes uncertainty and disagreement between states, and finally causes war (Fearon, 1995). When a state aggregates and hides its capacity, power, technology, strategy, investment and allies, the other state may fear about the alteration of the balance of power and as a result, strike, or may think that it is more powerful than the other so that it can win the war. According to the mechanism of the theory, these disagreements between states for the war option (Fearon, 1995). On the other hand, the theory neglects the point that these disagreements between the states might also lead a state to believe that it is not more powerful than the other state.

Second, the bargaining model of war argues that due to the bluffing and incentives to misrepresent private information, states have disagreements over their capabilities, and each side believes they could win the war. However, the issue of disagreement in the model is problematic. As Smith and Stam (2004) argue, disagreement does not arise due to the adversaries are bluffing to each other and hide the real information, rather; it occurs because adversaries have different

beliefs about the nature of the war. Even in the state of having complete information about the other actor (when no actor is bluffing), states might still have conflicting believes and might not reach an agreement. Also, sometimes private information and disagreement about the military technology, can lead to peace. For instance, one of the reasons that the USA does not wage war against Iran -- although they have a conflict over the proliferation of nuclear weapon--, is that the USA does not know exactly about Iran's technology. In that case, incomplete information about the adversaries' capability leads to the absence of war rather than war.

Third, according to the mechanism, states may aggregate their military power (Reiter, 2010) and may bluff about their power, so that there may be uncertainty about the balance of power between states. Due to this uncertainty, each state might consider it is more powerful than the other one; they each think they will win the war when they fight. Uncertainty about the balance of power may lead the challenger state to over-demand from the defender state in the bargaining. Similarly, uncertainty about the distribution of power may lead the state to underestimate the other state's will to go to war (Reed, 2003). For instance, Germany's decision on the invasion of the Soviet Union (USSR) in June 1941 happened because of Germany's overestimation of its military power compared to the Soviet military power.⁸ Also, the dispute between Pakistan and India over Kashmir cannot be solved because Pakistan's nuclear capabilities are unclear (Reed, 2003). In this case, the asymmetric information increases the probability of conflict between India and Pakistan. All in all, the bargaining model of war argues that uncertainty, which arises as a result of the private or incomplete information between the actors, can lead actors to fight. However, the argument does not entirely explain how much or to what extent uncertainty is necessary for going to war. Uncertainty due to the private/incomplete information is not only present between the states that are fighting, but also occurs among all of the states in the world, given that states generally have a tendency to hide their information. For example, although the US and the USSR both aggregated and hid their true capabilities during the Cold War, the uncertainty between the parties did not lead to a hot war.

⁸ Hitler's words about Russia's power can be concrete evidence. As Reiter (2010) quotes, Hitler told Guderian that "If I had known that the figures for Russian tank strength which you gave in your book were, in fact, the true ones, I would not_I believe_ ever have started this war" (p.11).

According to the model, there may be disagreements about military technology, and investment between the states. Each actor may suspect but not be entirely certain about the other states' military technology and investment. Thus, this uncertainty prevents other states from trusting each other, so incomplete information might cause a commitment problem. When there is ambiguity about the technology and investments of other state, the states initiate preventive wars⁹ (Levy, 2011) because preventive war gives a chance to the states to strike before the balance of power shifts (Debs & Monteiro, 2014).¹⁰ The mechanism of the model predicts that temptations for preventive war can be exacerbated by uncertainty about future intentions due to the commitment problems that might arise as a result of the informational problems. However, this logic creates misspecification in the theory because the cause of war becomes a commitment problem rather than incomplete/private information problem.

The mechanism of private information might also be extended to having an alliance. For example, third-party intervention to war or the likelihood of intervention may lead states to the disagreement over the probability of winning. If the challenger state does not know that the defender state has alliances that can intervene in the dispute between them, the challenger state might feel confident about winning the war and initiate a war by overestimating his probability of winning. On the other hand, in this mechanism, allies' tendencies must also be considered. In this kind of circumstance, an ally would most probably reveal the information about her tendency to prevent the potential war between the parties because the potential war would be costly for itself as well. Once a potential ally reveals the information or signals that it would be intervening, that would not be considered as incomplete information. For example, the USA's naval ship, Missouri's visit to Turkey in 1954 revealed information to the USSR about the alliance between the USA and Turkey; and signaled that any potential attack coming from the USSR to Turkey and its straits might be responded by the USA as well.

As a consequence, while the explanation of incomplete information might seem persuasive, it is misleading due to its explanations on uncertainty, private

⁹ "Preventive war is a state strategy to use military force to forestall an adverse shift in the distribution of power between two states" (Levy, 2011, p. 87).

¹⁰ Preventive war can also occur with complete information about capabilities and trends in capabilities. However, here, I only refer to the preventive war that occurs under incomplete information since incomplete information might cause a commitment problem (Debs & Monteiro, 2014).

information on alliances, and its reduction the commitment problem to the private information problem.

2.1.2. Problems of Credible Commitments

The mechanism of commitment problem might seem more convincing than the private information mechanism because it does not involve the problems related to the internal validity of the theory. Yet, the mechanism's explanatory power is still limited and might be increased by integrating more elements from the domestic political explanations such as signaling in domestic politics, and organizational theories (Reiter, 2003).

According to the theory, the commitment problem arises when one of the states cannot credibly commit that it will not use force in the future (Fearon, 1995).¹¹ Because the international system is anarchic, there is no authority that can force states to hold their promises.¹² In this anarchic environment, if the balance of power is changing between the states, the one that uses the first-strike-advantage would defect sooner. Moreover, if power is shifting between the states, the rising power cannot credibly commit itself to be a benevolent hegemon. To prevent the rising power from being dominant over the declining power, declining power might initiate a war against the rising power (Fearon, 1995). Six-day War can be given as an example of the credible commitment problem. When Israel administration suspected about Egypt's nuclear weaponing, so increasing its power, Israel launched a preventive war against Egypt with the help of France and Britain in 1956 (Mueller et al., 2006).

Another example of the problem of credible commitment as a cause of war is Germany's war policy to continue fighting, particularly in 1917-1918. Reiter argues that the driving factor that led Germany to continue the war is the commitment problem (2003). Given that American troops "threatened to shift the balance of power in favor of the Allies" (Reiter, 2003, p. 170), Germany, not believing that France and Britain would consider a peace deal, and that negotiations would solve the conflict with the Allies, has decided to continue the

¹¹ The problem of credible commitment can lead to war even in the state of complete information (Levy and Thompson, 2010).

¹² In economics, the buyer and seller can agree on a contract that has sanctions thanks to the court of justice. Therefore, both buyer and seller are enforced to hold their promises based on this contract. However, in international relations, states often violate agreements. The agreements are not legally binding because of the lack of a supranational authority.

war to acquire more of the disputed good and reduce the commitment problem (Reiter, 2003).

The Crimean War can be another example of the war caused by a commitment problem. Weisiger (2013) argues that Britain waged a preventive war against Russia because Britain wanted to limit Russia's future ability to be a threat to Britain when Britain realizes the Russian expansion through the Black Sea and its influence over the Ottoman Empire. According to Weiseger (2013), although the involved parties met in the conference and agreed to terms, they were afraid because they believed neither parties would abide by their promises and obey the status quo: British believed that Russia's desire for Ottoman survival was not real because of the power concerns, and Russia would like to acquire Constantinople. For that reason, the credible commitment problem between the parties caused the Crimean War (Weiseger, 2013).

However, in all of these examples, the commitment problem does not involve the domestic structure and process of the war; instead, takes the states as unitary actors, which is an incomplete explanation. On the other hand, if we seek to explain the war as a bargaining process, analyzing the conduct of war is also crucial for the explanation of, especially absolute war. There are different institutions and organizations such as military organizations that have different cultures and beliefs. These organizations may see the adversaries as hostile and alter the bargaining process. With these various institutional beliefs, actors may not recognize that they overestimate their capabilities or underestimate the other's capabilities. For instance, the 2003 Iraq War could be considered as an example of the credible commitment problem, although Iraq would be never dominant over the US. When the Bush administration came to power, they were more suspicious about Saddam Hussein's Weapons of Mass Destruction (WMD) program than Clinton administration. It has been discussed that Saddam Hussein's proceeding misrepresentations of these programs led the USA to wage war against Iraq because Iraq could not credibly commit itself to the WMD program. On the other hand, sources show that domestic political actors, interest groups such as oil companies, and the military-industrial complex and state organizations such as the Central Intelligence Agency (CIA) have critical roles in the initiation of war by the USA (Lake, 2010).

Also, domestic politics can affect the expected utility of war because the leader's expectation may change in relation to the domestic cost. Different institutional settings influence the domestic cost of war, and in turn the bargaining;

for instance, democracies resolve the trade-off by allocating more resources to warring than autocracies do (Powell, 2002) because leaders in democracies might be punished if they lose a war even moderately while autocrat leaders are not punished unless they lose the war disastrously (Goemanns, 2000). Losing the war is more costly for democrats than for the autocrats. Therefore, bargaining might arise as a less costly option for democrats compared to going to war. The similar logic might also apply to the mixed regime types. According to Goemanns (2000), "leaders of mixed regimes can anticipate the same degree of punishment by citizens, whether they lose disastrously or moderately" (p. 70). This might affect the leaders' decision in mixed regimes to initiate the war negatively, but to continue the war positively (Goemanns, 2000).¹³

Also, not only the state organizations and interest groups are influential on war decision, other actors and issues within the domestic politics are not taken into account extensively in the mechanism of commitment problem even though these factors might change the nature of the commitment problem. Some actors might be opposition parties and their leaders. If a state challenges another state and cannot credibly commit that it will not use force in the future, the opposition party leader of the challenger state might signal and reveal information about the intention of the incumbent party if the leader of the opposition party needs outside support. Hence, the actions of the opposition party could also alter the bargaining process.

Given the potential impact of domestic account, the explanatory power of commitment problem mechanism needs to be reconsidered with the domestic politics as the negotiation and war are both products of domestic politics.

2.1.3. Indivisibility Over the Issues

Another mechanism in the bargaining model of war is the indivisibility over the issues. However, the mechanism ignores the fact that issue indivisibility is usually created by the state leaders; therefore, the mechanism is misleading in the sense that it can be reduced to the commitment problem as well as to the incomplete information.

¹³ Goemans (2000) notes that "the reaction of Germany's semi-repressive regime when they learned that they would likely lose the war" can be seen as an example for a continuation of war related to regime types (p. 70).

In the theory, the bargaining model assumes that issues are divisible into their parts so that states can offer and/or counteroffer during the negotiation and share the issues (territory or allocated resources). Accordingly, any settlement that is mutually preferable to war must be a proportionate division of the states in dispute. However, if issues are indivisible, they cannot be divided possibly that lie in the bargaining space (Levy & Thompson, 2010). Jerusalem is a popular example because it is an allegedly indivisible holy city; this character of the city leads Israel and Palestine to fight because the parties cannot negotiate to share it. Taiwan, Kashmir, Northern Ireland are also seen as indivisible cities that cause conflict (Goddard, 2009).

But why a settlement of Jerusalem (or other territories such as Kashmir, Taiwan) cannot be reached through an agreement to alternate sovereignty? Although the mechanism of the bargaining model argues for the indivisibility of these cities due to the sovereignty problem, the parties might reach an agreement on alternate sovereignty. The reason why the parties do not reach an agreement lies in the commitment problem, not in the indivisibility problem. More specifically, the parties cannot reach an agreement on the alternate sovereignty over the city because the first one to control the city might not give it up; in other words, credibly commit itself. This implies that the indivisibility problem can be reduced to a commitment problem, which leads Fearon (1995) and others to dismiss commitment problems.

The mechanism of issue indivisibility¹⁴ can be misleading because it does not take domestic politics into account for analyzing war initiation, duration, and termination even though issue indivisibility is often created by state leaders for domestic gains. Although Jerusalem, Taiwan, Ireland are commonly considered as indivisible cities, Goddard (2009) argues that the indivisibility is constructed by political leaders; the territory is not indivisible, but issues are. Accordingly, politicians aim for the legitimation when they are bargaining over the territory. While they are making their claims over territory, the leaders might manipulate the situation because they need to explain to the public why their demands are legitimate (Goddard, 2009). Furthermore, leaders also create indivisibility over the issues when their popularity is falling, or the survival of their rule is under threat.

¹⁴ Fearon (1995) does not tell us much about indivisibility; he mainly emphasizes the role of private information and the problem of credible commitment. Levy and Thompson (2010) states that Fearon (1995) does not explain so much about indivisibility because indivisible issues are naturally domestic; therefore, these issues are out of the domain of bargaining.

For example, according to the diversionary theory of war, leaders might create "rally around the flag effect" by creating "others" and initiating a conflict with the "others" if they feel their popularity is falling or they have a domestic challenge or concern (Levy, 1989). Under this circumstance, one of the efficient ways to increase the popularity and diverting the attention of the public is initiating an external conflict. Issues such as religion and culture might be easily meaningful for the public so that the leaders might use these issues by making it meaningful for the public. As a result, leaders might create issue indivisibility and initiate a war, not because the issue is truly indivisible but because the leader needs to gain his popular support back. Tarar (2006), combining the bargaining approach with the diversionary theory, illustrates that when there is an option for bargaining, and war is highly costly, the leader would choose bargaining if the cost of war exceeds the benefit of survival in his rule. Conversely, when the benefit of ruling is too much compared to the cost of the war, the leader might initiate a war to look out his domestic interests (Tarar, 2006). For that reason, the indivisibility of the issues alone cannot be counted as a cause of war despite its importance in the cause of war.

As a consequence, due to the reductionism of the issue indivisibility to the commitment problem, and its negligence of domestic politics, the mechanism of issue indivisibility seems misleading. With the commitment problem and incomplete information, these three mechanisms of the bargaining theory of war show us some essence of the causes of war. However, the mechanisms still have limitations and can be misleading in some of its explanations.

CONCLUSION

As an assertive alternative to the other theories of war, the bargaining model clearly and notably contributes to the analysis of the causes of war in general. Most importantly, the bargaining model of war shows us not only the initiation of war but also termination, duration, and consequences of war and provides us to see the strategic interactions of the states in the process of war. It can also be implemented in civil wars. Therefore, the bargaining model of war emerges as a remarkable model that is progressive, analytic, useful, and persuasive for the explanation of war.

On the other hand, it still has limitations that need to be reconsidered. These limitations appear within the concepts of the problem of disagreement, uncertainty, take it or leave it protocol, indivisibility, rationality and risk aversion of the actor, evaluation of the state as a unitary actor, lack of sufficient cause. The bargaining model of war argues that uncertainty leads to war but knowing how much uncertainty causes war is necessary. However, measuring the uncertainty seems nearly impossible, so what causes uncertainty and what does not can be studied in future works. Again, take it or leave it protocol needs to be enhanced because states make counteroffers, or simply wait inactively for years most of the time after the bargain. The bargaining model of war could include that possibility in future studies, especially by calculating the continuation value and discount factor of bargaining process. Besides, bargaining model of war assumes states as unitary actors. However, states include different institutions and organizations such as military organizations and opposition parties that influence the decision to go to war during the process of conduct a war. The bargaining model of war would give us a better explanation if it could show what the influence of these organizations into this process is. Therefore, future studies must focus on the two-stages bargaining process which involve the in-state bargaining such as between the leader and organizations and inter-state bargaining. Moreover, the mechanism of indivisibility over the issues seems reductionist and so misleading because the mechanism can be simply reduced to the commitment problem or private information problem. Issue indivisibility might be connected to the domestic concerns of the leaders and reduced to the commitment problem while disagreement over the resources are discussed in future studies.

Finally, the bargaining model of war assumes all the leaders are risk-neutral or risk-averse. However, there are risk-seeking and risk-acceptant leaders that are essential to analyze if we seek to explain causes of war. Although the expected utility model and prospect theory seem like they are in disagreement over the idea of rationality, the bargaining model of war can benefit from the psychological explanation of the decision-making, such as prospect theory in future studies (Lake, 2010).

REFERENCES

- Albornoz, F., & Hauk, E. (2014). Civil War and U.S. Foreign Influence. Journal of Development Economics, 110(C), 64-78.
- Anderton, C. H. (2017). The Bargaining Theory of War and Peace. *The Economics* of Peace and Security Journal, 12(2), 10-15.
- Blainey, G. (1988). Causes of War. Simon and Schuster.
- Brown, M. E., Cote Jr, O. R., Lynn-Jones, S. M., & Miller, S. E. (Eds.). (2000). *Rational Choice and Security Studies: Stephen Walt and His Critics*. The MIT Press.
- Clausewitz, K. V. (1976). On War. Princeton University Press.
- Copeland, D. C. (2015). *Economic Interdependence and War*. Princeton University Press.
- Debs, A., & Monteiro, N. P. (2014). Known Unknowns: Power Shifts, Uncertainty, and War. *International Organization*, 68(1), 1-31.
- Doyle, M. W. (1997). Ways of War and Peace. W.W. Norton.
- Fearon, J. D. (1995). Rationalist Explanations for War. *International Organization*, 49(3), 379–414.
- Filson, D., & Werner, S. (2002) A Bargaining Model of War and Peace: Anticipating the Onset, Duration, and Outcome of War. *American Journal of Political Science*, 46(4), 819-837.
- Gartzke, E. (1999). War Is in the Error Term. *International Organization*, 53(3), 567–587.
- Goddard, S. E. (2009). *Indivisible Territory and the Politics of Legitimacy: Jerusalem and Northern Ireland*. Cambridge University Press.
- Goemans, H. E. (2000). War and Punishment: The Causes of War Termination and the First World War. Princeton University Press.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An Analysis of Decision Under Risk. *Econometrica*, 47, 263–291.
- Lake, D. A. (2010). Two Cheers for Bargaining Theory: Assessing Rationalist Explanations of the Iraq War. *International Security*, *35*(3), 7–52.

- Levy, J. S. (1989). The Diversionary Theory of War: A critique. In Manus I. Midlarsky (Eds.), *Handbook of War Studies* (pp. 259-288). Routledge Revivals.
- Levy, J. S., & Thompson, W. R. (2010). Causes of War. Wiley-Blackwell.
- Levy, J. S. (2011). Preventive War: Concept and Propositions. International Interactions, 37(1), 87–96.doi:10.1080/03050629.2011.546716
- McCarty, N., & Meirowitz, A. (2007). *Political Game Theory: An Introduction*. Cambridge University Press.
- McDermott, R. (2001). *Risk-Taking in International Politics: Prospect Theory in American Foreign Policy*. University of Michigan Press.
- McLaughin Mitchell, S. (2017). Dangerous Bargains with the Devil? Incorporating New Approaches in Peace Science for the Study of War. *Conflict Management and Peace Studies*, 34(1), 98-116.
- Mueller, K. P., Castillo, J. J., Morgan, F. E., Pegahi, N., & Rosen, B. (2006). Striking First, Preemptive and Preventive Attack in U.S. National Security Policy. Rand Corporation.
- Oneal, J. R., & Russett, B. (1999). The Kantian Peace: The Pacific Benefits of Democracy, Interdependence, and International Organizations, 1885-1992. *World Politics*, 52(1), 1-37.
- Powell, R. (2002). Bargaining Theory and International Conflict. Annual Review of Political Science, 5(1), 1–30.
- Reed, W. (2003). Information, Power, and War. *American Political Science Review*, 97(4), 633-644.
- Reiter, D. (2003). Exploring the Bargaining Model of War. *Perspectives on Politics*, 1(1), 27–43.
- Reiter, D. (2010). How Wars End. Princeton University Press.
- Schelling, T. C. (1960). The Strategy of Conflict. Harvard University Press.
- Smith, A., & Stam, A. C. (2004). Bargaining and the Nature of War. *The Journal of Conflict Resolution*, 48(6), 783–813.
- Streich, P., & Levy, J. S. (2016). Information, Commitment, and the Russo-Japanese War of 1904-1905. *Foreign Policy Analysis*, 12(4), 489-511.

- Tarar, A. (2006). Diversionary Incentives and the Bargaining Approach to War. *International Studies Quarterly*, 50(1), 169-188.
- Wagner, R. H. (2000). Bargaining and War. American Journal of Political Science, 44(3), 469–484. http://doi.org/10.2307/2669259
- Wagner, R. H. (2007). *War and the State: The Theory of International Politics*. University of Michigan Press.
- Waltz, K. N. (2001). *Man, the State, and War: A Theoretical Analysis*. Columbia University Press.
- Weisiger, A. (2013). Logics of War: Explanations for Limited and Unlimited Conflicts. Cornell University Press.
- Wolford, S., Reiter, D., & Carrubba, C. J. (2011). Information, Commitment and War. *Journal of Conflict Resolution*, 55(4), 2011, 556-579.
- Woosang, K. & Morrow, J. D. (1992). When Do Power Shifts Lead to War?. *American Journal of Political Science*, 36(4), 896-922.