

Strategic interaction between Russia and US in Syria: a game theoretic analysis from 2014-2022

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Abstract:

The strategic interests of Russia and the US clash in the Syrian conflict. Moscow's policy in Syria aims for the Assad government to remain in power, whereas the US policy seeks to bring a regime change in Syria by toppling the Assad government. The competition and cooperation between Russia and the US in the Middle Eastern region are quite complex and reflect a tussle for regional dominance. A game theoretic analysis is conducted for the interaction between two great powers to examine the strategies opted by both players in the case of the Syrian civil war. This paper analyses the role of Russian and American regional policy objectives in Syria from 2014 to 2022. This study considers the cause-and-effect relationship in the regional supremacy of Russia and the US and studies them as independent variables. The conflict in policy goals of both powers in the Syrian conflict is taken as the dependent variable. The methodology applied in this paper is game theory because it explains cause-and-effect phenomena in a systematic and detailed manner. The game between Russia and the US is to achieve maximum foreign policy objectives in Syria, which is concluded as a zero-sum game from 2014-2022.

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1. Introduction

The US and Russia have been archrivals since the Cold War; however, the relations between Washington and Moscow remained smooth and stable after the Cold War. The Syrian Crisis started in March 2011 and transformed into an intense domestic conflict in no time with regional and global consequences. The Syrian conflict has involved “both global and regional powers” (Kaye, 2022). It has gained central importance in world politics because of the interests of global powers. The Arab Uprisings that ultimately culminated into Syrian conflict in 2011 brought the interests of both states at a clash once again. The Syrian conflict clearly revealed disagreement between both the US and Russia over several issues and a clash of strategic interests in the region. The US policy towards Syria aims to bring about a regime change by toppling Assad government whereas Russia supports its longtime and only ally in the Middle East and wants Bashar-al-Assad to remain in power. Consequently, a systematic analysis of the US-Russian relationship with special reference to the conflict in Syrian becomes an important area of study.

This study aims to expand on the US and Russia’s ambitions for regional dominance by examining their opposing policies towards the Middle East especially Syria. For this purpose, this study considers the relationship of cause and effect in regional supremacy of Russia and the US and studies them as independent variable. The conflict in policy goals of the power in Syrian conflict is taken as dependent variable. A game theoretical model is applied for a systematic and precise analysis of causal relationship in Syrian conflict.

The methodology used in this paper gives a comprehensive explanation of application of game theoretic model for Syrian conflict. Furthermore, it examines the conflict between Moscow and Washington in the post-Arab Spring era over regional supremacy and dominance. This paper discusses the US and Russia’s strategies and policies adopted particularly in Syria to achieve the goal of regional supremacy. For a deeper understanding of the strategies adopted by both sides, a game theoretical model is developed to validate the link between the ambitions of regional dominance of the US and Russia and their policies in the Syrian conflict.

2. Literature review

Conflict analysis is a significant subject for practical as well as theoretical areas. Bulk of literature is available to study conflict in political science, international relations, and other disciplines due to the nature of conflict. Some of the dominant approaches like realism, rational choice theory, theories of foreign policy and game theory provide explanation of nature, patterns, and dynamics of conflict. Conflict analysis works under the intellectual debate driven by realist approach dominating the theoretical and practical discourse of the interstate or intrastate conflicts.

Morgenthau, a traditional realist stresses that power is the goal of state’s power whereas; Waltz

who is known as defensive neorealist suggests that the interests of states' may sometimes be survival to uni-polarity. Brooks contends that the essence of realist disagreement depends on whether states are conditioned by the mere possibility of conflict or alternatively, make decisions based on the probability of aggression (Brooks, 1997). For every case, realism is concerned primarily with the determinants of distributive bargaining among states (Jensen, 2014). Mearsheimer maintains that structural realism ignores, cultural differences among states as well as differences in regime type, mainly because the international system creates the same basic incentives for all great powers (Dunne, 2021). Mearsheimer's structural realism lays emphasis on power but falls short in explaining the origin of power. Considering power and material capabilities only, then Legro and Moravcsik argue, that what is missing are assumptions about the source and resolution of conflict (Jensen, 2014).

In the contemporary world, as such, the most applicable school of thought is realism (Hamilton, 1981). A major shortcoming, however, lies in the predictive quality and explanatory values of realism in conflict analysis. Legro and Moravcsik suggested that realist theory stands on three core assumptions (Jensen, 2014) i.e., the international political environment is anarchical, the units of analysis are unitary, and states are sovereign. Sir Henry Kissinger also believed in a society of sovereign states where an agreement will be maintained only if all partners consider it in their interest (Kissinger, 2011).

One of the fundamental principles of realism is that cooperation is attainable if both parties have shared interests (Jervis, 1988). Game theory, however, does not necessarily certify that strategies will align between two states to induce cooperation, such strategies nonetheless exist, and are recognizable through game theoretic modeling (Morrow, 1994). Realism argues that in international affairs, "states are the principal actors as opposed to actions as representations of the state's leaders (Hamilton, 1981). The game theory says that in international relations, it is the nation's leaders who are ultimately making the decisions; the actions are still understood as actions of the state as an entirety, and not simply as the actions of an individual at the helm of affairs (Mesquita, 1985).

According to realists, the actions taken by a country are directed towards amassing state power and security. Likewise, much of realism relies heavily on power, interest, and anarchy as a foundation (Caporaso, 1992). It must also be realized that the military strategies developed by either Russia, or the US lack a democratic consensus. These decisions call for immediate action, and democratic processes restrain the ability to act (Caporaso, 1992). Many actions are also backed by threat of force, another concept not flexible enough to be prolonged by a democratic proceeding (Caporaso, 1992). Finally, as realism argues, sometimes we can deduce preferences from the structure of the system (Jervis, 1976) and that system is what constitutes most of game theoretic approach. The shortcomings of game theoretic approach to explain the international political structure makes us classify the contemporary situation of global politics as anarchical as realists see states as principal actors in politics, with an absence of any central government to enforce external rules (Waltz, 2014).

In the light of the above discussion, it is clear that in the discipline of IR, there is still no theoretical framework that analyses the impact of a purely local conflict on the foreign policies of the great powers involved in a conflict. The scholars of international relations have worked on the intersection of domestic politics and international relations. However, the theories focusing on domestic politics do not analyze if domestic politics influences foreign policy in the world political system. Furthermore, the existing theories of international relations do not provide a comprehensive framework to analyze the domestic considerations shaping international relations.

3. The methodology: game theoretical modeling

The occurrence of conflict is very normal in human life. Conflict exists everywhere ranging from large-scale national wars to very common issues in our society. Today we quite often witness internal conflicts transforming into internationalized civil wars. Moreover, the militarized intervention of the leading powers of the global system in a domestic conflict, siding with opposite actors involved in the conflict is giving tough times to conflict analysts to understand the different aspects of conflict and give win-win solutions to the intervening parties. Therefore, a systematic analysis is required to study such a complex situation in-depth. In Syria, there exists not only competition between Russia and the US but also troubling issues like global terrorism and Islamic radicalization. In the case of Syria particularly, a game theoretic approach is more effective in determining the cause-and-effect relationships between the actors involved. Arthur Stein emphasizes on mathematical modeling as the efficient method to study conflict in Syria using analytical strength, “internal consistency and deductive understanding of the game theoretical approach” (Stien, 1999).

Researchers and scholars of international relations argue that rational choice theory (Wight, 2023) as a methodology developed “a positivist understanding of science rather than a theory of international relations” (Schmidt, 2002). This methodology provides a simplified solution despite studying the diversity and complexity of the social and political world. In this regard, the scholars supporting rational choice theory and game theoretical approach (Bhardwaj, 2023) do not attempt to discover such laws that have large scale and complex structural explanations. Conversely, they make observations and explanations that focus on individual cases rather than structures (Lichbach, 2003). In international politics, the game theoretical model employs the tools of mathematics to calculate the strategic interactions of states and their consequences (Bhuiyan, 2018).

A question may arise as to why game theory should be applied to the analysis of international politics. A pertinent answer to such a question is that the game theoretical model analyses observable issues that require relevant answers. There is no doubt about the complexity of the international interactions, as they require a lot of detail. Game theory is a valuable tool for analyzing conflict because it provides a framework for understanding the strategic interactions among all the players involved in the conflict or in a game. The tools of game theory are useful

because the mathematical structure of game theoretic model ensures that “our thoughts are disciplined, not contradicted and logical consistency is achieved” (Powell, 1999). Moreover, it helps to identify the potential outcome of the different policies and strategies taken by all players in a conflict situation.

Consequently, game theoretic models, “as a necessity of rational choice theory, fulfill the function of simplification” (Martin, 1978). Mathematical models help in simplifying the complex state interactions and clearly explain the causal relationship, i.e., factors leading to a particular consequence. Thus, “they constitute an accounting standard that offers a language through which a scholarly community can communicate ideas and intuitions” (Powell, 1999). King empathized “this communication is a prerequisite of any scientific research” (King, 1995). Game theoretical models enable the researchers to explain comprehensively the answers to their research questions. Güner stresses that “detailed descriptions or portrayals, made intensively, do not constitute an answer to specific questions on interstate interactions” (Guner, 2003). Another notable function of the models of game theory is to verify the foreseen consequences by simplifying complex relationship networks. Alternatively, “if game theoretical analysis accords with a former explanation, the model becomes the game theoretical proof of that explanation” (Guner, 2003).

Game theoretical models are mostly applicable to simplify conflict situations that involve strategic interactions of two or more (if possible) actors. Although the fundamental principle of rational choice theory is shared by all game theoretic models, e.g., assumptions of rationality, the context in which it is applied varies. In this regard, “game theoretical models can be applied to any actor and any strategic interaction” (Stien, 1999). These merits of game theory result from the contextual features of rational choice theory. Folker’s ideas show that egoist and altruist actors can be studied by developing models (Folker, 2015). Furthermore, the models that economists develop have their basis in firms and individuals; this can benefit the scholars and researchers of international relations who can examine the interactions among people within state bureaucracies.

The game theoretical approach serves as the methodology of this study. Game theoretical models demonstrate relationships of cause and effect in a simplified and more precise manner. Due to the merits of game theoretic modeling, this paper conducts an in-depth study of the game between the US and Russia with special reference to the Syrian conflict. For this purpose, Syrian conflict is taken as case study because it shows the conflicting interests of Russia and the US in the Middle East. Hence, this paper provides a game theoretical analysis of the US-Russian rivalry in the Syrian conflict.

The proposed model is developed in the following in a strategic form. As Turocy and Von Stengel indicate, “a game in strategic form, also called as normal form, is a compact representation of a game in which players simultaneously choose their strategies. The resulting payoffs are presented in a table with a cell for each strategy combination” (Turacy, 2001). After

a discussion on game theoretic approaches, the remaining part of the paper comprises of an analysis of strategic interaction between the US-Russia rivalries in a post-Arab Spring scenario. However, a brief overview of the US-Russia relations is discussed to explore and analyze the tussle between Russia and the US where the regional ambitions of both are discussed as independent variables.

4. Post-Arab Spring Russia US rivalry in the Middle East

The diplomatic relations between the Russia and the United States became intense in the post-Arab Spring in 2011. Moscow has heavily invested in Syria because it is Russia's only ally in the Middle East (Wesser, 2019) and it strongly condemned the US military involvement in Syria in 2014.

The US-Russia rivalry took a new turn after the Arab Spring in 2011. It began when Putin pursued an assertive foreign policy (Robinovich, 2016) in the Middle East in order to position Russia as a strong competitor of the US in the Middle Eastern region. This region has a diverse Muslim population and is rich in oil and natural resources. There are many conflicts taking place in the region, e.g., Israel-Palestine conflict and Yemeni conflict, which have already put policy makers in Washington under immense pressure for regional dominance. Russia further added to this pressure by getting actively involved in the Middle Eastern politics, especially in Syria, and by pursuing complex policies and interacting with Iran, Israel, Iraq and Palestine.

In comparison to US, Russia took a milder stance on Iran, when it entered the P5+1 negotiations with Tehran over the nuclear deal (Robinson, 2022). The Russian involvement enabled Iran to get a better deal. When the Arab Spring 2011 strained the relations between Egypt and Saudi Arabia, "Russia threatened to provide Iran and Syria with a game-changing weapons system in its dealing with Washington and Jerusalem" (Pollak, 2022).

The Syrian conflict in March 2011 brought a twist in the Russian policy and rivalry with the US in the Middle East. Since the beginning of the conflict, Moscow sided with Bashar-al-Assad. Moscow's support strongly manifested itself when in October 2015, the UN Security Council resolution was prevented (with China's help), which would have stopped military intervention (Nicholas, 2019) and the exhaustion of all attempts to reach a political settlement predicated on Assad's removal.

Moscow could not afford the fall of Syria and increase of the US influence in Syria. In the summer of 2013, with the help of Russia, the chemical weapon crisis in Syria was diffused. Assad regime had promised not to cross the red line drawn by Obama, but he did. Therefore, Russia offered the elimination of Syria's chemical stockpile in order to avoid a major US air raid. Through this deal, Putin was not only successful in helping Obama avoid a major air strike on Syria but also did not let down Russia's only and long-standing ally in the region. This also boosted Putin's image as a power broker in Middle Eastern politics.

4.2. A game theoretical model of the US-Russia rivalry: game in Syria

After the Cold War, it was like a historical incident that the United States and Russia's military power confronted each other on the ground and in the skies in Syria in 2015, while supporting opposite sides. It must be noted that Kremlin has lingering interests in Syria because it is the only reliable ally in the region. The most significant factor in US-Russia relation is the changing context of Moscow's view of this conflict. The US and Russia's contradictory strategic interests are due to Moscow-Washington's tussle for regional dominance and because of Syria's strategic importance for both. There is a partial overlap of Russia's and the US' interests that are at stake in the Syrian conflict. Although the US and Russia both agree on the importance of a stable Syria, they differ on how to achieve this.

Therefore, a game theoretical model is developed and applied on the Syrian conflict in order to study the foreign policy objectives of Russia and the US in the region. The proposed model is applied on Syrian case because it is important to define the strategies of the US and Russia, the two players involved in Syria.

The US strategies are:

- a) *Support to Syrian Opposition* and
- b) *No Support to Syrian Opposition*

Russian strategies are:

- c) *Support to Assad Government* and
- d) *No Support to Assad Government*

These strategies are deduced from the US and Russian policies towards the Syrian conflict, which will be analyzed and explored in the remaining part of this paper. The model is developed on the basis of the above strategies which are as follows:

Table 1: Game theoretic model on Syria with the strategies of players and possible outcomes

RUSSIA	
Support to Assad government	No support to Assad government
S _A	S _B
UNITED STATES	
Support to Syrian opposition	No support to Syrian opposition
S _C	S _D

On the basis of the table given above, strategies of both Russia and the US, the possible outcome from the proposed model provides explanation of strategy preferences opted by each

player involved in the conflict. Under the above matrix of strategies of game model between the US and Russia, there are four possible strategies:

S_A : The US *supports the Syrian opposition* and Russia *supports the Assad government*.

If the US supports the Syrian opposition and Russia supports the Assad government, i.e., S_A , the outcome may be a prolonged conflict with significant loss of life and resources for both sides. However, Russia's support for the Assad government may result in a favorable outcome for the Assad regime and a strengthening of their relationship, while the US' support for the Syrian opposition may lead to a new regime.

S_B : The US *supports the Syrian opposition* and Russia shows *no support to the Assad government*.

If the US supports the Syrian opposition and the Russia does not support the Assad government, i.e., S_B , the outcome may be a shorter conflict with a victory for the Syrian opposition. The US may gain a new ally and expand their influence in the region, while the Russia may lose influence.

S_C : The US shows *no support to the Syrian opposition*, but Russia *supports the Assad government*.

If the US does not support the Syrian opposition and Russia supports the Assad government i.e., S_C , the outcome may be a shorter conflict with a victory for the Assad regime. Russia's support for Assad government may still strengthen their relationship and allow them to expand their influence in the region.

S_D : The US shows *no support to the Syrian Opposition* and Russia shows *no support to the Assad government*.

Hence, the conflict continues.

If the US does not support the Syrian opposition and the Russia does not support the Assad government, i.e., S_D , the outcome may be a prolonged conflict with no clear victory for either side. Both the international players may lose their influence in the region and both powers will be seen as ineffective.

Each strategy, i.e., S_A , S_B , S_C and S_D result in a different outcome for the conflict, with each player having a preference over the outcomes. Based on these outcomes, the preferred strategy for the Russia would depend on their priorities because of their foreign policy interests in the region. If their priority is to maintain their relationship with the Assad regime and expand their influence in the region, they may choose to support the Assad government regardless of the

US' strategy. On the contrary, if their priority is to avoid a prolonged conflict and limit their losses, they may choose not to support the Assad government and seek a peaceful resolution of the conflict.

In the same way, the preferred strategy for the US would depend on their priorities based on their global and regional policy objectives. If their priority is to support the Syrian opposition and promote democracy in the region, they may choose to support the opposition regardless of the Russia's strategy. On the other hand, if their priority is to avoid further escalation and limit their losses, they may choose not to support the opposition and seek a diplomatic solution of the conflict.

For further analysis, it is important to identify the preference ordering of players in the game, i.e., the US and Russia for possible outcomes in their favor. For this, a lexicographic method is applied for better results that suggests, “the player arranges its objectives in a hierarchical order” (Pappalardo, 2008). Furthermore, the primary and secondary objectives of the US and Russia need to be clarified. The policy objectives of both the Russia and the US are inferred in their actual foreign policies towards the Syria and its significance for their regional dominance and supremacy.

In this regard, the primary policy objective of the US in Syria is, firstly to topple Assad government. Syria has not been an easy prey for the US, and this time the US is unable to devise a strategy in its favor. The Obama administration announced that Assad must go (Ryan, 2014; Hussain et al., 2022).

Secondly, “the US policy objective is to back the moderate political and military opposition forces against the Damascus regime” (Khoury, 2015). In lieu of this, the US has increased the military support to the Syrian opposition.

Thirdly, the US threatens Syria with a full-scale military intervention if any traces of chemical weapons are discovered on the Syrian soil. In 2013, the Assad regime used chemical weapons, although earlier denied by the Assad government. Therefore, “the US moved resolution in the Congress to authorize the president to use the US armed forces for carrying out appropriate enquiry into the use of chemical weapons in Syria in order to prevent the proliferation and transfer of these weapons to other parts of Syria or parties hostile to the US” (Sadek, 2016; Mirza et al., 2021).

Fourthly, Obama wanted to reduce the active presence of US military in the Middle East and resist international pressure of any military intervention in the wake of Syria's 2011 uprising. President Obama launched bombing campaign against the Islamic State in order to cut down its rapid expansion in 2014. Obama wanted to defeat ISIS on the battlefield and seek a negotiated political agreement with Assad. Although Obama's air war was quite successful against ISIS but peace efforts with Assad went nowhere. The US was not in the position to take

up new fronts especially after its long military involvement in Afghanistan and Iraq. By backing Assad regime, Putin marked Russia's role of as a mediator in the regional conflict (Khoury, 2015; Mehmood et al., 2022).

The fundamental US policy objective is persistent due to strategic importance of Syria in the region for the US regional supremacy that mainly focuses on the removal of Assad regime. In this way, Washington would opt and prefer strategy S_A and S_B over S_C and S_D to get best possible results in the hands of Syrian oppositions. Hence, the US strategy preference would be $\{S_A, S_B\} > \{S_C, S_D\}$. In such strategy preferences, providing support to Syrian opposition is considered as the dominant strategy for the US in the game. Meanwhile, the US policy makers formulated its regional policies in such a fashion that meet with their objective of removal of Assad regime from power.

In contrast to Washington's position, the fundamental objective of Moscow's policy in Syria is to help the Assad regime and to keep Assad in power. There are many reasons for Russia's support for Assad's regime. Firstly, Assad regime remained loyal to Russia for a long time in the region. Russia's policy towards Syria was driven by simple calculus: Assad's regime was the last reliable Russian ally in the Middle East and has great strategic importance to the Russian naval base in Tartus and the airfield on the Syrian coast near Latakia. Russia supports and protects Syrian regime in order "to secure its strategic interests, especially to protect its naval facility at the Syrian port, Tartus, which serves Russia's sole Mediterranean base for its black fleet" (Allison, 2013).

Secondly, Russia strongly opposed the US led intervention in Libya and caused Putin to draw a line in Syria, opposing to the US use of force against Assad government what it viewed as a "regime change" agenda. Russian foreign minister Sergei Lavrov applied the Libya logic to Syria when in May 2011 he said, "the calculation is that foreign players will get imbued with this problem and will not only condemn the violence there, but subsequently repeat the Libyan scenario, including the use of force" (Lavrov, 2011; Tayyab et al., 2020). The fundamental policy objective of Moscow towards Syria is "to prevent the US from any military involvement like Libya to remove the Assad government. Russian Foreign Minister Lavrov warned some leaders of the coalition forces and later the NATO secretary-general called the Libyan operation a 'model' for the future. As for Russia, we will not allow anything like this to happen again in the future" (Borozna, 2022).

Thirdly, the Russia knowing the sensitivity of the conflict feared any "US military adventure in the region that would target its only trusted ally in the Middle East after the statement made by President Obama called for Assad to step aside" (Bowen, 2020). Initially, Putin's strategy was "to avoid US interventionism by supplying the Assad government with arms and equipment, and by blocking efforts to pressure the Assad regime in the UN Security Council. The Russia and China have always supported the Assad regime and vetoed the Security Council's initiative against him" (Foot, 2020).

On the basis of strategy preferences of the US and Russia, their payoffs are as follow:

Table 2: Game matrix of Syrian conflict consists of the payoffs of players

RUSSIA	
Support to Assad government	No support to Assad government
3, 2 (a ₁ , b ₁)	4, 1 (a ₂ , b ₂)
UNITED STATES	
Support to Syrian opposition	No support to Syrian opposition
1, 4 (a ₃ , b ₃)	2, 3 (a ₄ , b ₄)

The strategic interaction between Russia and the US provides an outcome of game played over the Syrian conflict from 2014 and 2022 with a zero-sum game where “one side’s gain is another’s loss” (Nistor, 2020). The fundamental policy objectives of Russia and the US validate the proposed model because while the US built its regional supremacy and Syrian policies on the objective of removal of the Assad regime, the Russia pursued strategies for the continuation of the regime. In such a situation, it seems like one player is the complete winner and the other player is a loser at all. Therefore, this conflict situation has an outcome of a zero-sum game for the players.

Since the strategic interaction between the US and Russia results in a zero-sum game, hence, sensitivity to the relative gains (Grieco, 1988) is applied in a zero-sum situation. At the first place, the sensitivities of players, i.e., the US and Russia, to relative gain should be identified. The sensitivity has the highest value because the gain of one player is the loss of the other player in a zero-sum game. The mathematical sign for sensitivity value to relative gains is x. The limit of x has to be between $0 \leq x \leq 1$, where x is equal to 1 at the highest sensitivity value and 0 when it has no sensitivity (that refers to players care for complete gains rather than relative gains). In this regard, the value of x depends on sensitivity level. Its value declines if sensitivity is lower and it shows increment if sensitivity is higher.

The value of x is 1 in the Syrian conflict because mean value of sensitivity to relative gains has highest value due to zero-sum game situation the US-Russia strategic interaction. The highest values of sensitivity to relative gains are shown below:

Table 3: Zero-sum game in the Syrian conflict

RUSSIA	
Support to Assad government	No support to Assad government
a ₁ -xb ₁ , b ₁ - xa ₁	a ₂ - xb ₂ , b ₂ - xa ₂
UNITED STATES	
Support to Syrian opposition	No support to Syrian opposition
a ₃ -xb ₃ , b ₃ - xa ₃	a ₄ - xb ₄ , b ₄ - xa ₄

Table 4: Application of proposed model with zero-sum game

RUSSIA	
Support to Assad government	No support to Assad government
3-1.2, 2- 1.3	4-1.1, 1- 1.4
UNITED STATES	
Support to Syrian opposition	No support to Syrian opposition
1-1.4, 4- 1.1	2-1.3, 3-1.2

Table 5: Payoffs table for Russia and the US

RUSSIA	
Support to Assad government	No support to Assad government
1, -1	3, -3
UNITED STATES	
Support to Syrian opposition	No support to Syrian opposition
-3, 3	-1, 1

The proposed model signifies that Russia acquires better possible outcomes by opting to support the Assad government regardless of the US’ strategies. Russia secures -1 rather than -3 against the US’ strategy to support the Syrian opposition, and 3 rather than 1 against the US’ strategy of not supporting Syrian opposition by opting to support to Assad’s government. Likewise, the US gets better payoffs by selecting to support to Syrian opposition regardless of Russia’s strategies. At this point, the US obtains 1 as an alternate to -3 against Russia’s strategy to support Assad government, and 3 rather than -1 against Moscow’s strategy of no support to Assad government by opting to support Syrian opposition. Correspondingly, the US and Russia make use of the strategies support to Syrian opposition and support to Assad’s government. In the application of the proposed model, S_A outcome emerged as the dominant strategy and Nash equilibrium. For that reason, the US and Russia have no incentive to change their strategies. By means of this while the US acquires the next-best outcome, Russia gets the next-worst outcome as a result of their strategic interaction in the Syrian conflict under assumed objectives, preference orderings and strategies of the US and Russia.

5. Conclusion

This paper examines the US-Russian rivalry with the lens of game theoretical approach. Firstly, a game theoretic model is applied for the methodology of this paper because it helps to simplify causal relationships in a more precise and systematic manner. Secondly, the possible outcomes concluded could be further tested and proved with the help of a developed game theoretic model. Subsequently, the strategies of both the US and Russia inferred from the policy objectives of both major powers in Syria are applied to develop the model in the game in Syrian conflict to examine the causal relationship of regional dominance as an independent variable. Moreover, the competition and conflict in the policies of both Washington and Moscow in

Syrian game is taken as the dependent variable. In fact, Syria is strategically important state for the US and Russia in the region. Both states are following conflicting and different policies towards Syria due to their national interests. The competition and rivalry between these states played in such a way that strategic interaction between the US and Russia in Syrian game is concluded as a zero-sum game from 2014-2022. To put it another way, the win (profit) of one player (state) is equal to the defeat (loss) of the other player (state). Furthermore, the game theoretic model in this paper is developed for the strategic interaction of two players actively involved in a game situation to acquire their foreign policy objectives, i.e., Russia and the US. Finally, this proposed model endorses regional dominance, supremacy as causal relationship between Russia and the US, and their conflicting strategies in Syrian game.

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