SELİN ŞAHİN SUSTAINABILITY OF THE STRATEGIC PARTNERSHIP BETWEEN TURKEYAND RUSSIA Bilkent University 2019

SUSTAINABILITY OF THE STRATEGIC PARTNERSHIP BETWEEN TURKEY AND RUSSIA A GAME THEORETICAL ANALYSIS

A Master's Thesis

by

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May 2019

To My Family

SUSTAINABILITY OF THE STRATEGIC PARTNERSHIP
BETWEEN
TURKEY AND RUSSIA
A GAME THEORETICAL ANALYSIS

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of
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ABSTRACT

SUSTAINABILITY OF THE STRATEGIC PARTNERSHIP

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A GAME THEORETICAL ANALYSIS

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Since the dissolution of the USSR, the development of political relations between Turkey and Russia have paved the way for their recent closer relations which have been highlighted by different labels or concepts both in the media and in scholarly publications. Among these concepts/labels, 'strategic partnership' was expressed more frequently to define the relationship between the two countries in newspapers and the academic literature. Despite the popular use of the strategic partnership, there is no consensus on its definition or a consistent frame to explain this new form of cooperation between Turkey and Russia in the literature. Thus, this thesis aims to examine the strategic partnership as a function of existing interdependence between Turkey and Russia. Moreover, this thesis proposes two hypotheses about the sustainability of the strategic partnership between the two countries and tests the hypothesis by using the game theory. According to findings of thesis, no higher conflict would be expected between two countries which in turn would further highlight the sustainability of the interdependence between Turkey and Russia in the short and mid-term.

Keywords: Asymmetric Interdependence in Energy, Interdependence, Russia, Strategic Partnership, Turkey

ÖZET

TÜRKİYE VE RUSYA ARASINDAKİ
STRATEJİK ORTAKLIĞIN SÜRDÜRÜLEBİLİRLİĞİ
OYUN KURAMI ANALİZİ

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SSCB'nin dağılmasından bu yana, Türkiye ile Rusya arasındaki siyasi ilişkilerin gelişimi, son zamanlardaki yakın ilişkilerinin önünü açmıştır ve bu durum medyada ve akademik yayınlarda farklı kavramlar kullanılarak vurgulanmıştır. Bu kavramlar arasında, iki ülke arasındaki ilişkiyi tanımlamak için “stratejik ortaklık” kavramı daha sıklıkla kullanılmıştır. Stratejik ortaklığın bu popüler kullanımına rağmen, literatürde Türkiye ile Rusya arasındaki bu yeni işbirliği biçimini açıklamak adına stratejik ortaklık tanımı için bir fikir birliği yoktur. Bu nedenle, bu tez, stratejik ortaklığı Türkiye ile Rusya arasındaki mevcut karşılıklı bağımlılığın bir fonksiyonu olarak incelemeyi amaçlamaktadır. Ayrıca, bu tez, iki ülke arasındaki stratejik ortaklığın sürdürülebilirliği hakkında iki hipotez önermekte ve oyun teorisini kullanarak bu hipotezleri test etmektedir. Tez bulgularına göre, iki ülke arasında yüksek bir çatışma beklenmemektedir ve bu durum kısa vadede ve orta vadede Türkiye ile Rusya arasındaki karşılıklı bağımlılığın sürdürülebilirliğini vurgulamaktadır.

Anahtar Kelimeler: Enerjide Asimetrik Karşılıklı Bağımlılık, Karşılıklı Bağımlılık, Rusya, Stratejik Ortaklık, Türkiye

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CHAPTER 1

INTRODUCTION

Despite a steady phase of bilateral relations between Turkey and Russia since the dissolution of the Soviet Union, there have been not only improving trade relations, but also on-going political disagreements on different issues. In fact, the recent closer relations between Turkey and Russia, which have been highlighted by different labels or concepts both in the media and in scholarly publications, seem to reflect a new level of relationship. For example; "close neighborhood"[1], "expanded partnership"[2], "multidimensional partnership"[3], "deepened partnership"[4] and "strategic partnership"[5] are used to define the expanding bilateral relations between Turkey and Russia. Among these concepts/labels, 'strategic partnership' was expressed more frequently during the high level visits. This term was used by the two countries' diplomats and politicians as only a wish in the beginning of the 2000s. However, it has been increasingly used to define the relationship between the two countries in newspapers[6] and the academic literature[7]. Despite the popular use of the

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[1] Tezkan, Y. (2001). Kadim Komşumuz Yeni Rusya. *İstanbul: Ülke Kitapları*.
[2] Yeşiltaş, M., & Balcı, A. (2011). AK Parti Dönemi Türk Dış Politikası Sözlüğü: Kavramsal Bir Harita. *Bilgi Dergisi*, *23*, 9-34.
[3] Çelikpala, M. (2015). Rekabet ve işbirliği ikileminde yönünü arayan Türk-Rus ilişkileri. *Bilig*, (72), 117-144.
[4] Erşen, E. (2011). Turkey and Russia: an emerging "strategic axis" in Eurasia. *EurOrient, 35, 36*, 263-282.
[5] Özbay, F. (2011). The Relations between Turkey and Russia in the 2000s. *Perceptions*, *16*(3), 69.
[6] Such as Turkey's new strategic partner is Russia. (2019, January 1). Hürriyet Daily News, Retrieved from http://www.hurriyetdailynews.com/opinion/sedat-ergin/turkeys-new-strategic-partner-is-russia-but-140156, Turkish-Russian 'strategic partnership' will be tested in Idlib. (2018, August 25), Hürriyet Daily News Retrieved from http://www.hurriyetdailynews.com/opinion/serkan-demirtas/turkish-russian-strategic-partnership-will-be-tested-in-idlib-136124 , Moskova, N. H. (2018, August 25).

strategic partnership in political-diplomatic discourse, there is no consensus on its definition or a consistent frame to explain this new form of cooperation between Turkey and Russia in the literature. Thus, this thesis aims to examine the strategic partnership as a function of existing interdependence between Turkey and Russia. My thesis proposes two hypotheses about the sustainability of the strategic partnership between the two countries and tests the hypothesis by using the game theory. The major question that leads my game theory model and hypothesis is

> *What are the driving factors for the strategic partnership between Turkey and Russia?*

In terms of methodology, the present study is based on the method of game theoretic modeling. The strategic partnership is a function of interdependence between actors. Analyzing the interactions between actors and influence of one side's decision on other side is necessary to test the sustainability of the strategic partnership between Turkey and Russia. Game theory’s modeling techniques and interactive inferences are important tools to analyze such strategic interaction between countries, which have especially interdependence. In addition, game theory simplifies the complexity of reality by conceptualizing actors' preferences, utilities, and payoffs. With its mathematical operationalization, game theory also provides an observation on effects of actors' actions and helps making inferences about the relation between actors. Thus, game models are used as tool of conceptual exploration.

'Rusya stratejik ortak'. Hürriyet, Retrieved from http://www.hurriyet.com.tr/gundem/rusya-stratejik-ortak-vurgusu-40936512

[7] Such as Hill, F., & Taspinar, O. (2006). Turkey and Russia: axis of the excluded?. *Survival*, *48*(1), 81-92. Balcer, A. (2009). The future of Turkish-Russian relations: A strategic perspective. *Turkish Policy Quarterly*, *8*(1), 79-90. Öniş, Z., & Yılmaz, Ş. (2016). Turkey and Russia in a shifting global order: cooperation, conflict and asymmetric interdependence in a turbulent region. *Third World Quarterly*, *37*(1), 71-95.

In order to construct a game model for strategic partnership, I examined the factors determining the interdependence between Turkey and Russia through the historical background of the bilateral relations between Turkey and Russia. I reviewed the literature about Turkish-Russian relations to frame the interdependence in a historical context. I also used newspapers and secondary resources to describe recent developments in the bilateral relations including trade and investment.

The thesis is divided into five chapters including this introduction chapter.

Chapter 2 presents a historical overview of the bilateral relations. I reviewed the relevant literature to examine which theoretical arguments and related factors are considered for different eras of Turkish- Russian relations since World War I. This review helped me to describe the main characteristics of the bilateral relations between Turkey and Russia in the historical context. In the last section of the Chapter 2, the literature on the concept of 'strategic partnership' is reviewed. The common points in conceptual definitions of strategic partnership are identified to examine similar points in the case of bilateral relations between Turkey and Russia.

Chapter 3 illustrates the game model in terms of the development, construction and formation of the game to examine strategic partnership between Turkey and Russia. The chapter describes the process of building the game and possible equilibria according to preferences of players and analyses these equilibria.

Chapter 4 evaluates the possible demands of Turkey and Russia to act as a challenger by considering four dimensions of interdependence within the historical context of and recent developments in bilateral relations described in chapter 2. The chapter proposes four cases based on potential demands for the game model of strategic partnership. The sustainability of strategic partnership between Turkey and Russia is interpreted according to the solution of the games for each of the prosed four cases. The findings suggest that both states have high exit cost of strategic partnership due to the dynamics of interdependence between them. Although this high exit cost may lead to a low-level conflict, it prevents the any possible exit from strategic partnership and makes strategic partnership sustainable.

Chapter 5 concludes with a brief discussion of the findings. The chapter also presents the limitations of the findings and considers omitted factors for future research.

CHAPTER 2

HISTORICAL AND THEORETICAL BACKGROUND

This chapter presents a historical overview to examine which theoretical arguments and related factors were considered in the literature on relations between Turkey and Russia since World War I. Accordingly, I will consider these factors as a base for my game model in the next chapter. A major observation is that the bilateral relations have been not stable in this period including the relations both with the Soviet Union and the Russian Federation. Although both sides took concrete steps to improve bilateral relations in different fields since Turkey's Independence War, external factors, (such as change in the world order and balance of power in the region, strategy of states with new leaders) have influenced crisis between them.

The chapter describes the main characteristics of their bilateral relations in the historical context. Accordingly, in the last section of the chapter the concept of 'strategic partnership' and its use in the literature is reviewed to examine its meaning for the bilateral relations of Turkey and Russia in light of the major features of their relationship in the historical context. Such an examination reveals that the extents of common interests in their foreign policy priorities are important to establish strategic partnership and preserve its longevity in bilateral relations. The chapter ends by stating that there are three main issues (trade, energy and regional security) paving the way for strategic partnership and prompting Russia and Turkey to sustain this strategic partnership.

2.1 Historical Background of Bilateral Relations

2.1.1 From World War I to NATO Membership of Turkey in 1952

The economic and political devastations in the aftermath of the World War I led the collapse of the Ottoman and Russian Empires. The new states, namely the USSR and Republic of Turkey emerged with new leaders and state ideologies forming their interests and a new stage for bilateral relations. On the one hand, Mustafa Kemal's ideology of "Peace at home, peace in the world" was the main motivation and foreign policy goal for Turkey's efforts in strengthening its security and independence as well as building new security arrangements with its neighbors towards this end during the early years of the Turkish Republic[8]. On the other hand, Lenin had an expansionist ideology that the territorial security of the USSR and its long-term interest in the Middle East and Mediterranean regions targeted a particular relationship with Turkey in its foreign policy. Accordingly, the Soviet foreign policy strategy focused on involvement of Turkey in a regional pact dominated by the Soviets and Turkey's neutralization.[9]

Within this framework, the leaders' understanding of each other's security priorities and their common weakness led them to sign the *Treaty of Friendship* on 16 March 1921. Thus, the Soviet Union officially recognized Turkey during the Turkish independence war,[10] which was a significant achievement for the emerging Republic of Turkey's international recognition and the Soviet Union's material support for the independence movement.[11] In fact, Mustafa Kemal emphasized the importance of

[8] Aydin, M. (1999). Determinants of Turkish foreign policy: Historical framework and traditional inputs. Middle Eastern Studies, 35(4), 152-186.
[9] Karpat, K. H. (1975). Turkey's foreign policy in transition: 1950-1974 (Vol. 17). Brill Archive. p.79
[10] Ibid. p.81.
[11] Sonyel, S. R. (1986). Türk Kurtuluş Savaşı ve dış politika (Vol. 2). Türk Tarih Kurumu Basımevi. p.190 Kapur, H. (1966). Soviet Russia and Asia, 1917-1927: A Study of Soviet Policy Towards

Soviet Union support for independence movement and highlighted the friendly relations with the Soviet Union during his meetings with Frunze as ambassador of USSR in 1921. [12]

In the next years, the relations between Turkey and the Soviet Union evolved in the shadow of unresolved issues in the Lausanne Peace Conference in which the imperialist states recognized the Republic of Turkey. One of the most important unresolved issues in the conference was the territorial problem of Mosul. The Soviet Union actively supported Turkey at the League of Nations for the resolution of the Mosul problem.[13]

After Lenin's death, the bilateral relations continued smoothly under Stalin's leadership. The bilateral relation was strengthened by the *Nonaggression and Neutrality Agreement* in December 17, 1925.[14] This agreement played an important role for the institutionalization security understanding between two countries. In the following years, the political and commercial relations continued to develop. For example, in 1923, 2% of the Turkey's total imports were from the Soviet Union and in the following years this rate became 3.29%. Turkey exported tobacco, mineral and animal; and imported oil and food from the Soviet Union.[15] On 11 March 1927, the first Treaty of Trade was signed.[16] In 1929, Turkey's total imports was approximately 124,000 US $ and 6.3 % of it was from the Soviet Union. Turkey's total exports in

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Turkey, Iran and Afghanistan. London: published by Joseph for the Geneva Graduate Institute of International Studies.

[12] Aslan, Y. (2002). Mustafa Kemal–M. Frunze Görüşmeleri. Kaynak Yayınları, İstanbul.

[13] Güçlü, Y. (2002). The Uneasy Relationship: Turkey's Foreign Policy vis-à-vis the Soviet Union at the Outbreak of the Second World War. Mediterranean Quarterly, 13(3), 58-93.

[14] Gürün, K. (1991). *Türk-Sovyet ilişkileri, 1920-1953* (Vol. 67). Ankara: Türk Tarih Kurumu.

[15] Türkiye Salnamesi, Turkey Yearbook (1927), p.303

[16] Korhan, T. (2012). Türkiye Cumhuriyeti'nin İlk Yıllarında Türk-Rus Ticari ve Ekonomik İlişkileri Üzerine. Abant İzzet Baysal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 24(24), 91-104.

the same year were approximately 75,000 US $ in which exports to the Soviet Union consisted 3.49 % of the total. [17]

Moreover, Soviet Union provided monetary and technical consultancy support for Turkey's First Five Year Industrial Plan in 1934. With the Soviet Union's credit, industrial areas and factories, such as Nazilli Sümerbank Basma Fabrikası were established. The Russian engineers also helped Turkish workers in these factories.[18] With *the Trade and Navigation Agreement* signed on 8 October 1937, commercial activities between these two states increased. However, political and economic relations between Turkey and Soviet Russia slowed down and paused during the World War II era.

With the end of WWII, the USSR had started to flow a more active and influential foreign policy in the international politics. In 1945, the Soviet Union renounced *the Neutrality and Nonaggression Treaty* of 1925 and asked for a revision to serve its new demands. However, its demands based on the Turkish Straits, Kars and Ardahan districts were unacceptable for Turkey's.[19] Therefore, Turkey rejected Soviet demands. In the aftermath of the Soviet Union's new demands over Turkish territories, Turkey sought security assurances; and decisively shifted towards a pro-Western and anti-Soviet orientation.[20]

[17] Ibid., p.97. & TUIK (2018), Foreign trade statistics by years, 1923-2017. Accessed on http://www.tuik.gov.tr
[18] İlkin S. (1979). Birinci Sanayi Planının Hazırlanışında Sovyet Uzmanlarının Rolü. ODTÜ Gelişme Dergisi, p.258-275. Özder, F. (2017), "Birinci Beş Yıllık Sanayi Planı Ekseninde Atatürk Dönemi Türk-Sovyet Ekonomik ve Ticari İlişkileri", Ankara Üniversitesi Türk İnkılâp Tarihi Enstitüsü Atatürk Yolu Dergisi, V.60, p. 143-170.
[19] Kuniholm, B. R. (1980). The origins of the Cold War in the Near East: Great power conflict and diplomacy in Iran, Turkey, and Greece. Princeton University Press. Erkin, F. C. (1968). Türk-Sovyet ilişkileri ve Boğazlar meselesi. Erkin.
[20] Bilge, A. S. (1992). Güç komşuluk: Türkiye-Sovyetler Birliği ilişkileri, 1920-1964 (No. 316). Türkiye İş Bankası Kültür yayınları.

2.1.2 Cold War Era

During the Cold War, the bilateral relations continued mainly through economic interactions. With Stalin's death in 1953, the Soviet Union's foreign policy was reshaped that the harsh policies of communism were replaced by a rather moderate political discourse.[21] Meanwhile, the Democratic Party won the general elections on May 14, 1950 in Turkey. İsmet İnönü resigned from the presidency; and Celal Bayar became the third president of the Republic of Turkey. In light of the change in domestic politics of Turkey in 1950s, Turkish foreign policy had been implemented according to three fundamental issues: countering Soviet expansionism, ensuring military and economic cooperation with the West, and the Cyprus problem (especially after 1955). Thus, Turkey moved into a cautious approach against the Soviet Union. In fact, through the unfolding rivalry between the USA and the USSR, the American foreign policy elite under the Truman Doctrine considered Turkey as an important ally for the containment of the Soviet Union; and Turkey was included into the Marshall Plan. Thus, Turkey's efforts in seeking security assurances against the new Soviet threats eventually resulted in the Turkey's entry into the NATO in 1952 and a new phase in its bilateral relations with the Soviet Union.[22]

Within this framework, despite Turkey's new alliance with the NATO both Stalin's death and Turkey's efforts to boost its economic growth and to reduce its trade deficit facilitated the improvement of economic relations between two countries. On the other hand, there was a military coup on May 27, 1960 in Turkey, however, it did not cause a major political change in Turkish-Soviet relations.[23] Especially Turkey's focus on its new economic policy, namely import substitution industrialization (ISI)

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[21] Ibid.
[22] Ibid.
[23] Gönlübol, M., & Sar, C. (1982). Olaylarla Türk Dış Politikası (1919-1973), Cilt I. Kolektif Eser, 5.

in 1960s complemented with high level diplomatic visits between Turkey and the Soviet Union.[24]

Indeed, improvements in bilateral relations were evinced by the observed level of increase in credits, economic aid from Soviet Union. The new economic agreements with the Soviet Union supported Turkey's industrialization efforts under the ISI model that new strategic industrial investments, such as İskenderun Iron and Steel Industry, Aliağa Refinery and Seydişehir Aluminum Complex, were supported by the Soviet technical and monetary aid.[25] Accordingly, trade volume between Turkey and Russia increased (see Figure 1).

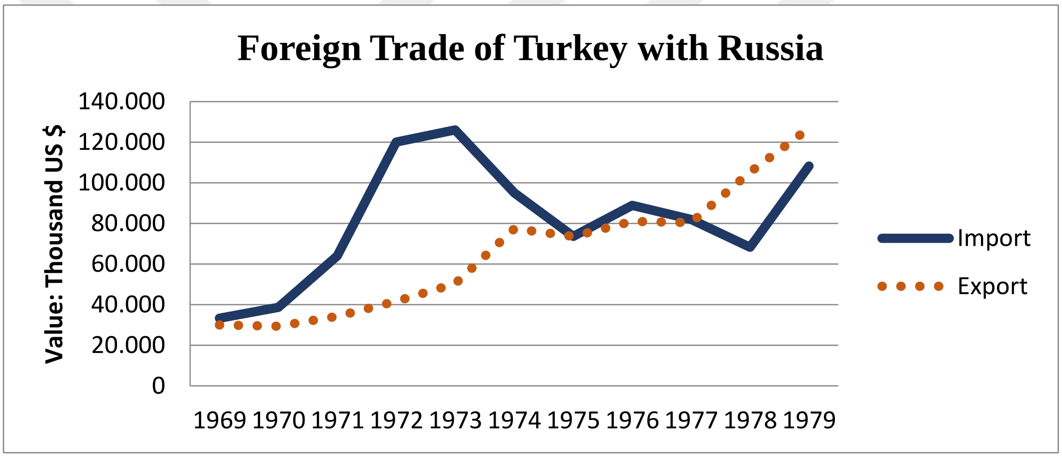

Figure 1: Foreign Trade of Turkey with Russia (1969-1979)

Source: TUIK Foreign trade statistics by country. Accessed on http://www.tuik.gov.tr

In the mid-1960s the Cyprus problem became a major issue challenging Turkish foreign policy that shaped Turkey's diplomatic relations.[26] Prime Minister Ismet Inönü decided on June 6, 1964 to intervene in Cyprus in order to prevent the ongoing attacks from turning into genocide. Prior to the intervention, the US ambassador was

[24] Tellal, E. (2002); "Sovyetler ile İlişkiler" in Türk Dış Politikası (ed.by. Oran, Baskın), Vol. I, İstanbul: İletişim Yayınları.
[25] Zürcher, E.J. (1997). Turkey – A Modern History, pp. 264-273. Tellal, E. (2002); "Sovyetler ile İlişkiler" in Türk Dış Politikası (ed.by. Oran, Baskın), Vol. I, İstanbul: İletişim Yayınları. Armaoğlu, F. (2004), "20. Yüzyıl Siyasi Tarihi", Alkım, İstanbul, p.830
[26] Karpat, K. H. (1975). Turkey's foreign policy in transition: 1950-1974 (Vol. 17). Brill Archive. p.91-95

called and informed about the intervention, and the ambassador requested 24 hours of negotiations with the US President. At the end of the day, the letter from US President Lyndon Johnson including threat expressions about Turkey's security was perceived as a diplomatic quake. The Johnson letter caused Turkey to see that its national interests may differ from the interests of the United States and NATO.[27] As a result, the search for independence in foreign policy and the transition to multilateralism in international relations have started. In this context, Turkey has started to seek ways to increase economic and political relations with the USSR, Middle East countries and other third world countries. Turkey ceased to be perceived USSR as a direct enemy and threat, and in parallel with this, a rapprochement with the USSR has started with the Foreign Minister Erkin's visit to Moscow.[28]

In the 1970s, the world economy was going through turbulent times. Two oil shocks in 1973 and 1979, abandonment of gold exchange rate system unilaterally by the US in 1971, and these crises severe implications for late industrializing developing countries, such as high inflation and increasing debt level were also observed in Turkey. The so called “24 January “ decisions in 1980 started a liberalization process in Turkish economy; and Turkey shifted to a new economic model known as “export-led growth”.[29] Interestingly, the USSR was also facing economic hardship in the mid-1980s as the burden of sustaining its inefficient production in different sectors under its military-industrial complex became unsustainable along with the challenges in the communist party and the Soviet foreign policy after the invasion of

[27] Derman, G. S., & Kurban, V. (2016). Kıbrıs Sorununun Türk Diş Politikasina Etkisi ve ABD-SSCB İle İlişkiler. *Çağdaş Türkiye Tarihi Araştırmaları Dergisi*, *16*(33), 455-484.
[28] Karpat, K. H. (1975). Turkey's foreign policy in transition: 1950-1974 (Vol. 17). p.91-95
[29] Öniş, Z., & Senses, F. (2007). Global dynamics, domestic coalitions and a reactive state: Major policy shifts in post-war Turkish economic development. *Domestic Coalitions and a Reactive State: Major Policy Shifts in Post-War Turkish Economic Development*

Afghanistan.[30] Thus, while Turkey started to follow a liberalization process in its trade policy in 1980s, the Soviet Union also started to experience restructuring ("prestreoika") in its economy and some political reforms ("glasnost") when Gorbachev became the new Soviet leader of the communist party.

For example, Turkey's first FDI into the Soviet Union was observed in construction and some engineering projects in 1980s. Turkish firms, such as ENKA, ALARKO and TEKFEN started to establish their strong reputations in Russia.[31]The trade volume between two countries also reached higher level in 1980s (see Figure 2). Moreover, the first agreement for importing natural gas was signed in 1984.[32]

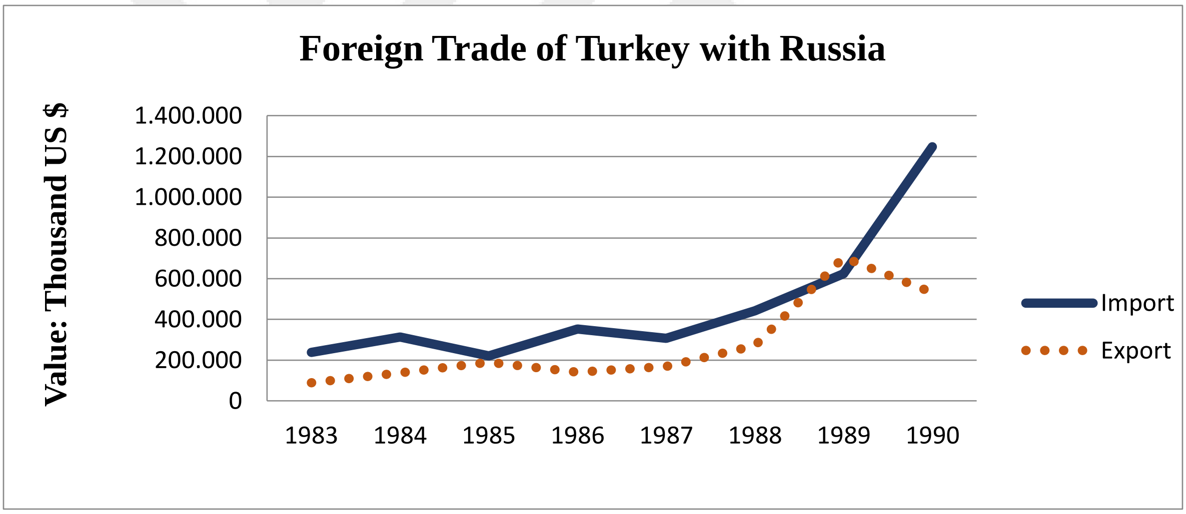

Figure 2: Foreign Trade of Turkey with Russia (1983-1990)

Source: TUIK Foreign trade statistics by country. Accessed on http://www.tuik.gov.tr

[30] Phillips, A. (2000). The political economy of Russia: transition or condition?. *Russia after the Cold War, Pearson Education Limited, Edinburgh*.Boratav, K. (2008). Türkiye iktisat tarihi, 1908-2007. İmge Kitabevi. p.145-149

[31] Öniş, Z. (2004). Turgut Özal and his economic legacy: Turkish neo-liberalism in critical perspective. *Middle Eastern Studies*, *40*(4), 113-134. Öniş, Z., & Yılmaz, Ş. (2016). Turkey and Russia in a shifting global order: cooperation, conflict and asymmetric interdependence in a turbulent region. *Third World Quarterly*, *37*(1), 71-95.

[32]Tellal, E. (2002); "Sovyetler ile İlişkiler" in *Türk Dış Politikası* (ed.by. Oran, Baskın), Vol. I, İstanbul: İletişim Yayınları.

2.1.3 Bilateral Relations between Turkey and Russian Federation

2.1.3.1 Early Period (1991-2000)

In the aftermath of the dissolution of the Soviet Union, the first diplomatic relation was established with the Russian Federation when the *Treaty of Friendship and Cooperation* was signed on May 25, 1992 during Prime Minister Demirel's visit.[33] The treaty symbolized the new bilateral relations based on good neighborliness, cooperation, and mutual trust.[34]

Nevertheless, there were disagreements that strained the bilateral relations between Turkey and Russia. First, there was distrust between two countries about claimed support to the minorities in their territories. During the high level visits a *Joint Declaration on the Fight against Terrorism* was issued,[35] however, there were "mutual recriminations of support for ethnic separatism." (Sezer, 2000: 64). While Russia accused Turkey of assisting Chechnya, Turkey also accused Russia of aiding Kurdish separatism and PKK (Kurdistan Worker's Party) terrorism.[36] Second, there were divergent views about how to regulate the increasing oil tanker traffic through the Turkish Straits. Russia objected "to Turkish policy since 1994 to regulate the traffic of vessels in the Turkish Straits for environmental and safety reasons (Sezer, 2000: 64). Third, exports of Russian arms in the East Mediterranean region seemed as a factor that could decrease the Turkish security in the region, "in particular the sale of S-300 air defense missiles to the Greek-Cypriot government in Nicosia and Russian assistance to Iran's nuclear program." (Sezer, 2000: 64). Fourth, there was

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[33] Sezer, D. B. (2000). Turkish- Russian relations: The challenges of reconciling geopolitical competition with economic partnership. Turkish Studies, 1(1), 59-82. "Turkey´s Political Relations with Russian Federation", Available at: http://www.mfa.gov.tr/turkey_s-political-relations-with-russian-federation.en.mfa .
[34] Ibid.
[35] Ibid.
[36] Ibid.

implicit tension in their respective approaches to the Caucasus and Central Asia regions.[37]

After the dissolution, especially Boris Yeltsin leadership, the economic transition from planned economy of Soviet Union to a market-oriented economy had started.[38] While the Russian economy had been experiencing a major restructuring process, Turkey had been also struggling with back to back financial crisis in 1990s. Despite the financial crises, Turkey's efforts to increase its exports continued especially after Turkey's Customs Union with the European Community in 1995. ,[39] Similarly, Turkey's exports to Russia considerably increased until the financial crisis of Russia in 1998 (see Figure 3).

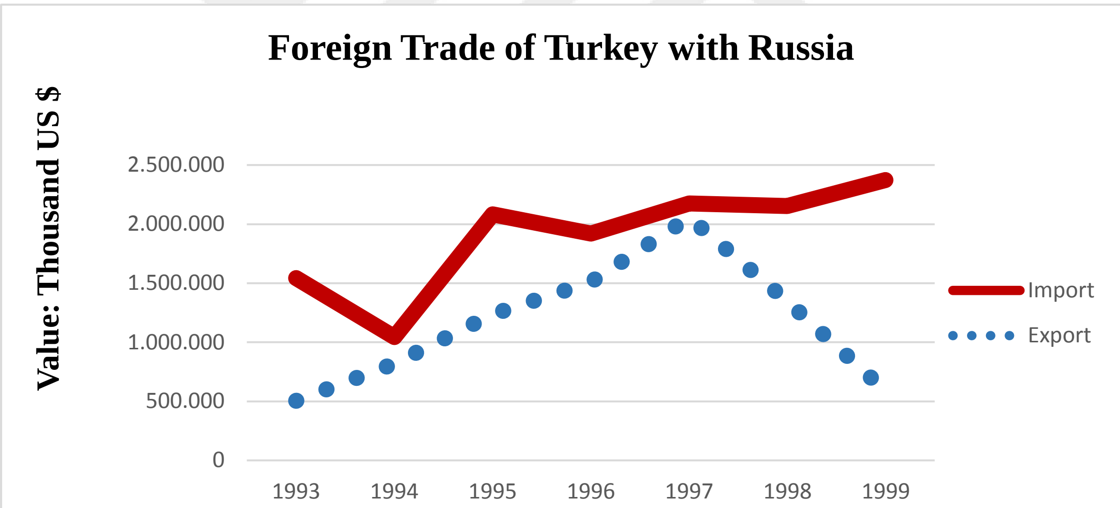

Figure 3: Foreign Trade of Turkey with Russia (1993-1999)

Source: TUIK Foreign trade statistics by country. Accessed on http://www.tuik.gov.tr

[37] Ibid.
[38] Kazgan, G. (2002). A survey of Turkish-Russian economic relations in the 1990s. *Insight Turkey*, *4*(2), 101-111.
[39] Cizre- Sakallioglu, U. M., & Yeldan, E. (2000). Politics, society and financial liberalization: Turkey in the 1990s. *Development and Change*, *31*(2), 481-508.

The financial crisis followed by political instability in Russia impeded an economic recovery, which in turn kept export to Russia at lower levels. However, imports from Russia were steadily growing due to the increasing natural gas demand of Turkey.[40] Thus, Turkey's energy-import dependency and new natural gas contracts with its energy rich neighbors have become an important issue for Turkey's foreign policy and energy security (see Table 1).[41]

Table 1: Turkey's Natural Gas Contracts

Contracts	Volume (bcm)	Contract Signature Date	Total Years of Contract	Gas Delivery Start Year	Contract Expiration Year
Russia (West Route) *	6	14.02.1986	25	1987	2011
Algeria (LNG)	4	14.04.1988	20	1994	2008-renewed
Nigeria (LNG)	1.2	09.11.1995	22	1999	2017
Iran	10	08.08.1996	25	2001	2021
Russia (Blue Stream pipeline)	16	15.12.1997	25	2003	2025
Russia (West Route)	8 (**)	18.02.1998	23	1998	2021
Turkmenistan	16	21.05.1999	30	no delivery	
Azerbaijan	6.6	12.03.2001	15	2007	2016-renewed
Russia (West Route) **	6	14.02.1986	25	1987	2011

Source: Energy Market Regulatory Authority's Natural Gas Sector Reports, 2009-2013

* The contract ended on December 31, 2011. Akfel Gas, Bosphorus Gas, Batı Hattı Gas, and Kibar Enerji signed a new contract for 6 bcm/year.

** Law No 4646 – Temporary Article 2 transferred 4 bcm/year of BOTAŞ's gas imports contract dated February 18, 1998.

In fact, during this period mutual high level visits paved the way for the *Blue Stream Pipeline Project*. On December 15, 1997 Russia and Turkey signed an intergovernmental agreement, which secured the value and time period for gas imports from Gazprom (Russia's state-owned gas company). Thus, BOTAŞ

[40] Kazgan, G. (2002). A survey of Turkish-Russian economic relations in the 1990s. *Insight Turkey*, *4*(2), 101-111.
[41] Ipek, P. (2017). The role of energy security in Turkish foreign policy (2004-2016). In *Turkish Foreign Policy: International Relations, Legality and Global Reach* (pp. 173-194). Pinar Gozen (ed.) Palgrave MacMillan.

(Turkey's state-owned gas and Pipeline Company) agreed to buy a total amount of 365 billion cubic meters of gas should be supplied to Turkey via Blue Stream within 25 years.[42]

2.1.3.2 The Putin Era (2000- Onwards)

When Vladimir Putin was elected as the President of the Russian Federation in 2000, Russia has shifted its foreign policy through a flexible approach. As Sakwa (2007)[43] and Thorun (2008)[44] argue, Putin had a strategic vision based on pragmatism, which sought to create a strong Russia in terms of politics, economy and military. During the recovery of Russian economy, Putin aimed to have a balanced attitude in Russian foreign policy by building good-neighborhood relations and partnerships. According to this strategy, Russia attempted to create a strong relation with Turkey via high level visits.

For examples, during Deputy Premier Klebanov's visit to Ankara on May 25, 2000, he delivered a letter to Turkish President Ahmet Necdet Sezer. In the letter, Turkey was portrayed as a traditional and important partner while Putin stated his desire "to upgrade the relations between Turkey and Russia to the level of a strategic partnership" (Sezer, 2000: 77).[45] Turkey responded diplomatically and expressed the potential to improve bilateral relations to the level of strategic partnership during high level visits. Thus, Russia and Turkey signed *Action Plan for Cooperation in Eurasia-From Bilateral towards Multilateral Partnership* in 2001,[46] *Framework*

[42]"Blue Stream", http://www.gazprom.com/projects/blue-stream/

[43] Sakwa, R. (2007). Putin: Russia's choice. Routledge.

[44] Thorun, C. (2008). Explaining change in Russian foreign policy: the role of ideas in post-Soviet Russia's conduct towards the West. Springer.

[45] Sezer, D. B. (2000). Turkish- Russian relations: The challenges of reconciling geopolitical competition with economic partnership. Turkish Studies, 1(1), 59-82.

[46] Aktürk, Ş. (2006). Turkish–Russian Relations after the Cold War (1992–2002). *Turkish Studies*, *7*(3), 337-364.

Agreement on Cooperation in the Military Field and Agreement on Cooperation in Training of the Military Personnel in 2002.[47]

In 2002, the Justice and Development Party (JDP) came to power in Turkey and Turkish Prime Minister Recep Tayyip Erdoğan and his foreign policy advisor Prof. Ahmet Davutoğlu presented five principles for foreign policy to establish balance between security and democracy in the country.[48]

1. Establishing an area of influence in its surroundings
2. Zero problem policy toward Turkey's neighborhoods
3. Developing relations with the neighboring regions and beyond
4. Applying a multi-dimensional foreign policy
5. Rhythmic diplomacy not as competitive

The period between 2004 and 2008 witnessed mutual high-level visits and important bilateral agreements signed between Turkey and Russia. During the visit of Abdullah Gül, Foreign Ministers of both countries signed the 2004-2005 Consultations Programme including security, maritime issues, bilateral political and economic relations, consular and cultural affairs, regional and international matters.[49] On December 5, 2004, Putin and his committee visited Turkey and it was the first state visit held at the presidential level from Russia to Turkey after 32 years period.[50] As a result of this visit, Russia and Turkey signed *Joint Declaration between the Republic of Turkey and the Russian Federation on Deepening Friendship and Multi-Dimensional Partnership* and six agreements.[51]

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[47] Ibid.

[48] Davutoğlu, A. (2008). Turkey's foreign policy vision: an assessment of 2007. Insight Turkey, 77-96.

[49] "Turkey´s Political Relations with Russian Federation", http://www.mfa.gov.tr/turkey_s-political-relations-with-russian-federation.en.mfa .

[50] It included the topics based on defense and security, energy, economy, the Black Sea region, the fight against terrorism, oil transportation through the Turkish straits and regional issues focusing on Cyprus, the Caucasus and the Middle East.

[51] "Agreement on Mutual Protection of the Rights and the Intellectual Property within the Framework of Military-Technological Cooperation", "Agreement on Mutual Protection of the Classified Information and Materials Transmitted within the Framework of Military- Technological Cooperation", "Agreement on Prevention of Incidents on the Sea Outside the Territorial Waters",

However, Russian–Turkish relations were seriously challenged when Georgia and Russia engaged in a war called "Five Day War" over South Ossetia in August 2008. According to Aktürk (2013),[52] Russian military intervention to Georgia damaged Turkey's strategic position in the Caucasus. This war brought back the issue of Russian control and influence over Caucasus, which changed threat perceptions about Russia in the post-Soviet regions. Moreover, according to Torbakov (2008),[53] the Georgian-Russian war raised traditional suspicions about insecurity in the minds of Turkish foreign policy makers.

Despite the emerging concerns over Russia's assertive foreign policy in the aftermath of the 2008 Georgia-Russia War and the 2009 Russian- Ukrainian gas crisis, the diplomatic initiatives in Turkish-Russian relations continued. For example, the *Joint Declaration between the Republic of Turkey and the Russian Federation on Progress towards a New Stage in Relations and Further Deepening of Friendship and Multidimensional Partnership* was signed in Moscow.[54] Moreover, the Turkish-Russian High Level Cooperation Council (HLCC) established in 2010.[55] President Medvedev, highlighted the growing Turkish-Russian relations characterized by "partnership, not just in words, but in reality" (Özbay, 2011: 84). [56] In short, since the first letter of intent in 2000 that declared for the first time during Putin administration's political will to move bilateral relations into a strategic partnership,

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"Cooperation Agreement Between Vnesheconombank, Roseksimbank and Eximbank of Turkey", "Memorandum on Development of Cooperation in Gas Sphere Between Gazprom and Botaş" and "Memorandum on Cooperation Between Diplomatic Academy of the Ministry of Foreign Affairs of the Russian Federation and the Center of Strategic Researches in the Ministry of Foreign Affairs of Turkey".

[52]Aktürk, S. (2013). Russian–Turkish Relations in the 21st Century, 2000–2012. *Russian analytical digest*, *125*, 2-5.

[53] Torbakov, I. (2008). The Georgia Crisis and Russia-Turkey Relations (Washington, DC: Jamestown Foundation).

[54] "Turkey´s Political Relations with Russian Federation", http://www.mfa.gov.tr/turkey_s-political-relations-with-russian-federation.en.mfa .

[55] Ediger, V. Ş., & Durmaz, D. (2017). Energy in Turkey and Russia's Roller-Coaster Relationship. *Insight Turkey*, *19*(1), 135-156.

[56] Özbay, F. (2011). The Relations between Turkey and Russia in the 2000s. Perceptions, 16(3), 69.

the economic relations between Turkey and Russia gradually increased along with the on-going disagreements over a set of regional security issues.

At the end of the 2010, the outbreak of Arab popular movements revealed a new period in Middle East politics. Russia and Turkey adopted different approaches to these political movements. The Syrian Civil War, which began in 2011, turned into a major disagreement between Turkey and Russia. Turkey blamed the Assad regime because of human rights violations; and pursued a foreign policy strategy pressuring for the downfall of the Baathist Assad regime in Syria. Russia was against any intervention into Syria; and continued to support the Assad regime.[57] The emergence of violent non-state actors in Syria and the Assad regime's incapability to stop civil war paved the way for Russia's military intervention into the conflict in September 2015. Thus, Russia's military deployment in Syria changed the balance in the regional security.[58]

While Russian jets have started to bomb anti-Assad groups in Syria since 2015, Turkey raised its concerns and warned Russia about civilian casualties. Particularly the security of Turkmens living in Syria became a sensitive issue for Turkey due to Turkey's close contacts and cultural ties with these groups (Özertem, 2017: 123). During this period, some reports accused Russian of assisting PKK and PYD/YPG[59], which resulted in lack of confidence between Turkey and Russia. In fact, PKK related the Democratic Union Party (PYD)/ People's Protection Units (YPG) elements took control over some parts of the northern Syria and advanced to the west

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[57] Ibid.

[58] Özertem, H. S. (2017). Turkey and Russia: A Fragile Friendship. *Turkish Policy Quarterly*, *15*(4), 121-134.

[59] Jones D., (27 May 2016;) "Suspicions about Russian Support of PKK Grow in Turkey," VOA News, http://www. voanews.com/a/suspicions-about-russian-support-rebels-grow-turkey/3349122.html; Çekirge F., (22 January 2016) "The secret of the Russian soldiers in Qamishli," Hurriyet Daily News.

that changed the threat perceptions of Turkey over the Syrian civil war (Özertem, 2017: 125).

On 24 November 2015, due to violation of Turkish airspace Turkey shot down Russian Su-24 warplane close to the Turkish-Syrian border, which undermined rapidly the Turkish-Russian relations.[60] As a result of this incident, Russia imposed trade sanctions against Turkey, however, the sanctions excluded the energy trade between two countries.[61] When Erdogan officially apologized for this shot down in June2016, the relations between Russia and Turkey also recovered quickly. Indeed, the assignation of Russia's Ambassador to Turkey Andrei Karlov in December 2016 did not turn into a crisis. Rather, both leaders defined this sad incident as a provocation to damage the normalization process of Turkish-Russian relations. Thus, normalization of relations has continued since 2016.

Within the framework of Turkey's changing threat perceptions against the PKK related PYD/YPG forces, Turkey increased its cooperation with Russia over the Syrian conflict. In fact, Turkey launched the Euphrates Shield Operation on 24 August 2016 with the objective of confronting ISIL terrorism and maintaining border security.[62] Moreover, Russia, Turkey, and Iran met for a political solution of Syria conflict at the Astana Summit in Astana, Kazakhstan in January 2017.[63] High-Level Astana Meetings have been held regularly since January 2017. In addition to the regular Astana meetings, these three countries have met many times at the level of heads of State (Sochi, 22 November 2017; Ankara, 4 April 2018; Tehran, 7

[60] Öncel, A., & Liapina, L. (2018). The effects of Turkish-Russian political relations on bilateral trade balance: Cointegration and causal analysis. *Theoretical & Applied Economics*, *25*(1).

[61] Sanctions included the abolition of charter flights between Russia and Turkey and suspending the visa-free regime for Turkish citizens, traveling to Russia.

[62] As It Happened: Turkish military, coalition forces launch 'Euphrates Shield' operation in Jarablus (2016, August 24), Hurriyet Daily News. Retrieved from http://www.hurriyetdailynews.com/as-it-happened-turkish-military-coalition-forces-launch-euphrates-shield-ope

[63] Joint Statement by Iran, Russia, Turkey on the International Meeting on Syria, 23-24 January 2017.

September 2018; Sochi, 14 February 2019), and at the level of foreign ministers (Astana, 16 March 2018; Moscow, 28 April 2018; New York, 26 September 2018; Geneva, 18 November 2018). Although Turkey and Russia have taken important steps on the situation of refugees and the preservation of the territorial integrity of Syria during these meetings, they do not have common approach about the Assad regime. [64]

In summary, since 2000 when both Turkey and Russia expressed their political will to improve bilateral relations into a strategic partnership, there were three bold military interventions of Russia in its post-Soviet geography, namely the 2008 Georgia-Russia War, the 2014 Russian military intervention in Ukrainian and the 2015 one in Syria. Nevertheless, the trade relations and particularly the volume of gas imports exports from Russia gradually increased. In fact, the level of bilateral trade has increased slightly following years of crises in bilateral relations in 2008 and 2016 (See Figure 4). Therefore, in the next sub-section, I will demonstrate in detail foreign direct investment and energy trade in bilateral relations between Russia and Turkey.

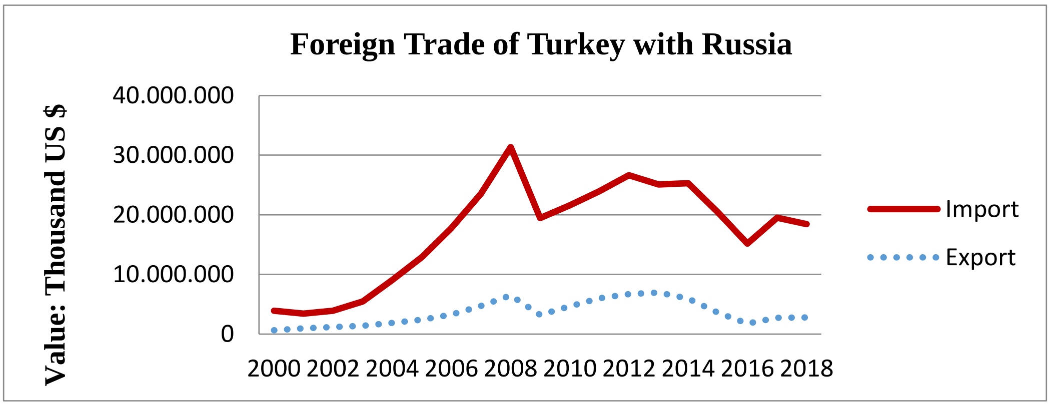

Figure 4: Foreign Trade of Turkey with Russia (2000-2018)

Source: TUIK Foreign trade statistics by country. Accessed on http://www.tuik.gov.tr

[64] Türkiye - Suriye Siyasi İlişkileri. Retrieved from http://www.mfa.gov.tr/turkiye-suriye-siyasi-iliskileri-.tr.mfa

2.1.3.2.1 Foreign Direct Investment and Energy Trade in Bilateral Relations (2000-onwards)

In terms of foreign direct investment (FDI), from 2003 to 2013, Turkish firms operating in Russia made “105 Greenfield investments with a total net investment amount of more than US$ 9 billion”.[65] For example, Şişecam opened a glass factory in Russia with approximately US$ 1.1 billion investment in 2016.[66] Likewise, Russia’s Magnitagorsk Iron and Steel Works and GAZ Group (Russia’s largest commercial motor vehicles producer) opened their plants in Turkey in 2011and 2014, respectively.[67] However, according to Köstem’s (2018) calculation, while FDI originating from Russia has accounted for 2.8% of the total FDI inflow to the Turkish economy between 2007 and 2016, FDI originating from Turkey has accounted for only 0.3 % of the total FDI in the Russian economy.

On the other hand, natural gas imports have dominated Turkey’s total imports from Russia. In fact, the importance of energy trade in bilateral relations was underlined under a special cooperation mechanism; and energy issues between Turkey and Russia were carried out through the HLCC (Turkish-Russian High Level Cooperation Council).[68] The scope of energy relations expanded beyond natural gas and oil imports that an intergovernmental agreement on the construction of a nuclear power plant in Akkuyu was signed between Russia and Turkey on 12 May 2010. ” (Aktürk, 2013: 4).[69] Further, in December 2014, Putin announced the cancellation of the South Stream gas pipeline project; and the memorandum of understanding signed

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[65] Bakır, C. (2016), Dünyayla İş Yapanlar, İstanbul: Koç Üniversitesi Yayınları, pp. 66-67.
[66] Ibid.
[67] Köstem, S. (2018). The Political Economy of Turkish-Russian Relations: Dynamics of Asymmetric Interdependence. *Perceptions: Journal of International Affairs*, *23*(2), 10-32. DEİK;(2008), *Rusya Ülke Bülteni*, İstanbul: DEİK
[68] Ediger, V. Ş., & Durmaz, D. (2017). Energy in Turkey and Russia’s Roller-Coaster Relationship. *Insight Turkey*, *19*(1), 135-156.
[69] Aktürk, S. (2013). Russian–Turkish Relations in the 21st Century, 2000–2012. *Russian analytical digest*, *125*, 2-5

between Russia and Turkey to build the so-called ‘Turkish Stream’. During the meeting, Putin highlighted the importance of the new pipeline with certain advantages for Turkey via elimination of the extra tariff costs and the transit risk. During the 23rd World Energy Congress in October 2016, the agreement on the construction of the Turkish Stream was signed in Istanbul.

2.2 Theoretical Background

2.2.1. Interdependence in Bilateral Relations

The concept of *interdependence* became a common term to describe particularly increasing economic transactions in the globalization process. In general term, “dependence means a state of being determined or significantly affected by external forces. Interdependence, most simply defined, means mutual dependence. Interdependence in world politics refers to situations characterized by reciprocal effects among countries or among actors in different countries” (Keohane & Nye, 1977: 8).[70]

In the late 1970s, Keohane and Joseph Nye also developed the model of ‘Complex Interdependence’ as a challenge to understanding of traditional and structural realism, which focused on military and economic capabilities to explain state behavior. Keohane and Nye in their book ‘Power and Interdependence: World Politics in Transition’[71], described three main characteristics of complex interdependence as (i) multiple channels of communication, (ii) absence of hierarchy among issues, (iii) and minor role of military . Complex interdependence includes both formal and informal interaction among governmental elites and transnational organizations. In complex interdependence, unlike realists’ assumption, security

[70] Keohane, R. O., & Joseph, S. Nye.(1977) Power and Interdependence: World Politics in Transition. *Boston: Little, Brown*.
[71] Ibid.

issues do not consistently dominate the agenda; and any issues might be at the top of the international agenda at any particular time.[72] In complex interdependence, using military force could be inapplicable to solve disagreements. Because using military force is very costly; and its results are uncertain.[73]

According to David A. Welch and Joseph S. Nye (2014), four dimensions of interdependence are important to clarify its conceptual definition: its sources (military or economic), benefits (zero-sum or nonzero-sum), relative costs (short-run sensitivity or long-run vulnerability) and symmetry.[74] While military interdependence means mutual dependence based on military competition, economic interdependence “is not merely a function of current economic activity, it is a function of economic activity within the context of available alternatives” (Crescenzi, 2003: 811).[75] Contrary to liberal analysts, Welch and Nye (2014) suggest that economic interdependence can also result in competition rather than cooperation. Because the benefits of economic interdependence cannot be equal for both sides, which may trigger struggle to get higher benefits from international relationship. Thus, the distribution of benefits among all involved parties is crucial issue for interdependence.

Two mere concepts are used to explain the relative costs in interdependence namely sensitivity and vulnerability. While sensitivity refers to “the amount and pace of the effect of dependence”, vulnerability refers to “the relative costs of changing the

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72 Rana, W. (2015). Theory of complex interdependence: a comparative analysis of realist and neoliberal thoughts. *International Journal of Business and Social Science*, *6*(2).
73 Keohane, R. O., & Joseph, S. Nye.(1977) Power and Interdependence: World Politics in Transition. *Boston: Little, Brown*. p.28

74 Nye, J. S., & Welch, D. A. (2014). *Understanding global conflict & cooperation: intro to theory & history*. Pearson Education.

75 Crescenzi, M. J. (2003). Economic exit, interdependence, and conflict. *The journal of Politics*, *65*(3), 809-832.

structure of a system of interdependence" (Welch & Nye, 2014: 276-277).[76]The last dimension of interdependence, symmetry is basically related to "relatively balanced versus unbalanced dependence". Similarly, Keohane and Nye (1977) argue that interdependence should not be defined only as 'balanced mutual dependence'. "It is asymmetries in dependence that are most likely to provide sources of influence for actors in their dealings with one another. Less dependent actors can often use the interdependence relationship as a source of power in bargaining over an issue and perhaps to affect other issues" (Keohane & Nye, 1977:10-11).[77]

Within this conceptual framework, we can analyze the bilateral relations between Turkey and Russia. When we consider the three main characteristics of complex interdependence, first the multiple channels are not strong without their governments' intervention. For example, the jet crisis at the Syrian border of Turkey not only increasing diplomatic tension (formal channel), but also trade sanctions applied by Russia and decrease in the number of Russian tourists visiting Turkey (informal/ non-state actors based interactions) due to the Russian government imposed travel and flight restrictions demonstrated the limits of channels of communication between two countries.[78] Second, military and security issues continue to be overweighed in bilateral relations of Russia and Turkey as we have observed in the on-going Syrian conflict, and the 2008 Gergian-Russian War.[79] Third, although the complex interdependence argument claims that the costs of using military force can exceed the benefits in an interdependent relationship, the

[76] Nye, J. S., & Welch, D. A. (2014). *Understanding global conflict & cooperation: intro to theory & history*. Pearson Education.

[77] Keohane, R. O., & Joseph, S. Nye.(1977) Power and Interdependence: World Politics in Transition. *Boston: Little, Brown*.
[78] Köstem, S. (2018). The Political Economy of Turkish-Russian Relations: Dynamics of Asymmetric Interdependence. *Perceptions: Journal of International Affairs*, *23*(2), 10-32.
[79] Ibid.

instability at the Syrian border and geopolitics of regional security underlines that national security concerns might potentially dominate over economic relations.

According to four dimensions of interdependence defined by Nye and Welch (2014), we can be said that the main source for interdependence between Turkey and Russia is based on energy. In terms of sensitivity, due to the amount of oil and natural gas imports from in Turkey's energy mix, Turkey's sensitivity in energy interdependence is considerably high (see Table 2 and 3).

Table 2: Turkey's Oil Imports by Countries (million tonnes)

	2010	2011	2012	2013	2014	2015	2016	2017
Iran	7.26	9.28	7.56	5.25	5.19	5.58	6.93	11.49
Iraq	2.01	3.07	3.73	6.00	5.48	11.40	9.25	7.05
Russia	3.32	2.13	2.11	1.46	0.60	3.10	3.23	2.07
S. Arabia	1.95	1.96	2.82	2.75	2.01	2.37	2.16	1.82
Kazakhstan	1.78	1.18	1.41	1.54	1.52	0.65	0.60	0.47
Nigeria	0.00	0.00	0.39	0.47	1.71	0.53	0.00	0.13
Libya	0.00	0.00	1.01	0.67	0.75	0.00	0.00	0.16
Italy	0.11	0.11	0.25	0.26	0.17	0.29	0.03	0.12
Syria	0.40	0.25	0.00	0.00	0.00	0.00	0.00	0.00
Colombia	0.00	0.00	0.00	0.00	0.55	0.86	0.00	0.25
Azerbaijan	0.00	0.08	0.16	0.12	0.00	0.00	0.00	0.00
Egypt	0.00	0.00	0.00	0.00	0.10	0.08	0.12	0.20
Kuwait	0.00	0.00	0.00	0.00	0.00	0.14	2.52	1.72

Source: Energy Market Regulatory Authority's Oil Sector Reports from 2010-2017.

Table 3: Turkey’s Natural Gas Imports by Countries (million cubic meters)

	Russia	Iran	Azerbaija n	Algeria**	Nigeria**	Other**	TOTAL
2010	17,576	7,765	4,521	3,906	1,189	3,079	38,036
2011	25,406	8,190	3,806	4,156	1,248	1,069	43,875
2012	26,491	8,215	3,354	4,076	1,322	2,464	45,922
2013	26,212	8,730	4,245	3,917	1,274	892	45,270
2014	26,975	8,932	6,074	4,179	1,414	1,689	49,263
2015	26,783	7,826	6,169	3,916	1,240	2,493	48,427
2016	24,540	7,705	6,480	4,284	1,220	2,124	46,353
2017	28,690	9,251	6,544	4,617	1,344	4,804	55,250

Source: Energy Market Regulatory Authority's Natural Gas Sector Reports from 2010-2017.
** Imports are as liquefied natural gas (LNG)

Especially, as İpek (2019)[80] mentions, due to the relatively high share of natural gas in Turkey’s electricity generation, electricity generation cannot be substituted with other energy sources in the short-term in an affordable way. Moreover, the relative costs of changing the structure of energy interdependence include also high risks for Turkey. Finally, this energy interdependence between Turkey and Russia is asymmetric interdependence due to the lack of sufficient energy resources in Turkey to compensate its consumption and the limit of its financial sources for new investment in infrastructure or alternative energy resources.[81] This asymmetry might be used as a source of power in bargaining over an issue in the bilateral relations of Turkey and Russia (such as trade-offs in Turkish foreign policy for the Syrian conflict under the Astana peace process).

[80] İpek, P. (2019). "Turkey's Energy Security in Eurasia: Trade-offs or cognitive bias?" in Turkey's Pivot to Eurasia: Geopolitics and Foreign Policy in a Changing World Order, Seçkin Köstem and Emre Erşen (editors), New York and London: Routledge.
[81] Ibid.

2.2.2 The Emerging Concept of the Strategic Partnership in Examining Bilateral Relations

Another important concept that has been increasingly used both in foreign policy practice and academic literature is ‘strategic partnership’. In this section, I will review the literature on strategic partnership and question whether such concept can be useful in analyzing the Turkish-Russian relations. Although the strategic partnership concept is often used in academic and political-diplomatic discourse, there is no consensus on its definition or a consistent frame to explain this new form of cooperation.

According to Ko (2006)[82], the concept of a strategic partnership defining a bilateral relationship was first mentioned in the Camp David summit in 1991. The Russian President Boris Yeltsin and the U.S. President George Bush made a joint declaration, which stated that both states no longer consider each other enemies and commit to the development of a partnership based on mutual understanding and trust. The very essence of the strategic partnership was not defined; however, reflected an intention to develop a framework for such cooperation when states sought the common benefit at the same time consolidating or expanding area of influence.[83]

In the context of the end of the Cold War, the concept of a strategic partnership reflected neo-realist postulates on the structure of the international system. Accordingly, states are sovereign international actors, which belong to a hierarchical category of power. State can maximize benefits and minimize action costs for their

[82] Ko, S. (2006). Strategic Partnership in a Unipolar System: The Sino-Russian Relationship. Issues & Studies, 42(3), 203-225.

[83] Gajauskaitė, I. (2013). Strategic Partnerships in Foreign Policy: Comparative Analysis of Polish-Ukrainian and Lithuanian-Ukrainian Strategic Partnerships. Lithuanian Annual Strategic Review, 11(1), 189-229.

primary strategic goals based only on the opportunity and constraints of the hierarchical order.

Wilkins (2008)[84] argues that strategic partnership was frequently confused with the concepts of coalition (emphasizes a short-term cooperation) and an alliance (emphasizes a military cooperation). According to Wilkins (2010)[85]'s conceptual distinction, the basis of cooperation for strategic partnership is not a common enemy, rather common interests and common security issues matter. Another important aspect of a strategic partnership is longevity. In other words, a strategic partnership refers to a partner's obligation to develop long-term relationships.[86]

The understanding of a strategic partnership has changed in time and 'strategic' has been interpreted in different ways. The recent literature on strategic partnership highlights the purpose of reaching a common strategic goal. Vahl (2001) underlines that the presence of *common values*, *common interests* and *mutual understanding* are essential criteria for a 'partnership', as opposed to mere 'co-operation'. Further, he emphasizes that the partnership should be 'on the basis of equality'.[87] Thus, according to him and Gentimir, (2015)[88], any asymmetric nature of the relationship between two states is a considerable obstacle to the emergence of a strategic partnership.

Lessa (2010) discusses the use of the strategic partnership in the context of the Brazilian foreign policy. He argues that strategic partnerships are "priority political

[84] Wilkins, T. S. (2008). Russo–Chinese strategic partnership: A new form of security cooperation?. Contemporary Security Policy, 29(2), 358-383.
[85] Wilkins, T. S. (2010). Japan's alliance diversification: a comparative analysis of the Indian and Australian strategic partnerships. International Relations of the Asia-Pacific, 11(1), 115-155.
[86] Sümer, G. (2010). Stratejik İşbirliği Ve Stratejik Ortaklik Kavramlarina Karşilaştirmali Bir Bakiş. Ege Academic Review, 10(2).
[87] Vahl, M. (2001). A Regional Approach to the 'Strategic Partnership': Strengthening EU-Russia Relations through the Northern Dimension. Working Paper, March, CEPS.
[88] Gentimir, R. A. (2015). A Theoretical Approach On The Strategic Partnership Between The European Union And The Russian Federation. CES Working Papers, 7(2), 288.

and economic relations, reciprocally compensating, established on the basis of an accumulation of bilateral relations of a universal nature" (Lessa, 2010: 119).[89] Similarly, Holslag (2011)[90] describes 'five main features' of strategic partnerships which include (i) identified *common interests and expectations,* (ii) formulation of these interests and expectations, (iii) *multidimensional* interests, (iv) *global* range of these interests and (v) district nature of incentives that they cannot be achieved without partnership and serve to *distinguish* it from other relationships (Holslag, 2011:295).

In fact, Gajauskaitė (2013)[91] claims that strategic partners choose the interest areas of their partnerships. Thus, Gajauskaitė (2013) also states that there is no single definition of the strategic partnership. The same concept is used to describe completely different forms and nature of cooperation. In short, he underlines that each case of strategic partnership is unique, because partners cooperate with substance according to their interests.

On the other hand, Czechowska (2013), examines the strategic partnership by using the realist theory of alliances and presents the differences between the sensu stricte and sensu largo alliance. First of all, she says that a strategic partnership, combining flexibility and deep rapprochement, has become a supplement for the multilateral negotiations on the global pressing issues. Through the sensu stricte, alliances are understood as "relations of two or more states based on the allied agreement, established to combine the military, political and economic forces and to settle a

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[89] Lessa, A. C. (2010). Brazil's strategic partnerships: an assessment of the Lula era (2003-2010). Revista Brasileira de Política Internacional, 53(SPE), 115-131.

[90] Holslag, J. (2011). The elusive axis: assessing the EU–China strategic partnership. JCMS: Journal of Common Market Studies, 49(2), 293-313.

[91] Gajauskaitė, I. (2013). Strategic Partnerships in Foreign Policy: Comparative Analysis of Polish-Ukrainian and Lithuanian-Ukrainian Strategic Partnerships. Lithuanian Annual Strategic Review, 11(1), 189-229.

common action in predicting a threat (aggression) from the third party. The military character of the relations in alliance is essential. Therefore, non-aggression pacts, defense pacts, unilateral guarantees and collective security pacts are included. On the other hand, the sensu largo alliance is “a coalition of states that coordinate their actions, to implement a goal” (Czechowska, 2013:45).[92] Accordingly, she applies the sensu largo alliance to define strategic partnership. She also mentions the distinction between the formal and the material aspect of strategic partnership. According to her definition, there are three necessary conditions for strategic partnership;

- Partner’s relations should demonstrate a privilege and intensity that surpasses the typical for both subjects level of enclosed relations with the third parties.
- There should be an advanced institutionalization of mutual relations between partners, both on interstate and inter-human level.
- The nationwide sympathies that have led to the creation of similar relations with people across the country based on trust and loyalty.

Moreover, in their book Michalski, and Pan (2017)[93], explores the meaning of strategic partnerships and its interrelated dimensions in the international system. Strategic partnerships, by definition denotes a special relationship, one that forms the basis for a coalition or an alliance, which is enduring and purposeful for both parties, and is concerned with matters of a higher order. Given the exclusiveness of the bilateral relationship that is implied in strategic partnerships, the concept is also considered normatively reflecting an agreement grounded in common interests between partners. Michalski, and Pan (2017) highlight that existing studies about

[92] Czechowska, L. (2013). The concept of strategic partnership as an input in the modern alliance theory,Copernicus Journal of Political Science issue 2 (4).

[93] Michalski, A., & Pan, Z. (2017). *Unlikely Partners?: China, the European Union and the Forging of a Strategic Partnership*. Springer.

strategic partnerships often refer to a lack of outcomes and, furthermore, a lack of consensus on normative principles and values between the parties. One reason for the lack of concrete outcomes is that strategic partnerships today are not exclusively forged between long-time friends and allies, but formed also between unlikely partners. Their definition includes these descriptive and constitutive elements:

1. They are bilateral relationships between states and international organizations that act to fulfill various kinds of strategic objectives. The partnerships are built on relations that are friendly or competitive, equal or unequal, geographically distant or close. The partnerships are intended to fulfill a mutually beneficial aim of some sort and to last in the longer run.

2. In terms of the scope of cooperation and structure, they vary between being loosely or strongly structured and between containing a high number of issue areas of cooperation or only a few.

3. They provide social structures to the international system through networks of bilateral relations with at least one significant international actor at the center.

4. They are built on a state-centered logic. In that sense, strategic partnerships are logically contrary to multilateralism, but do not work against multilateral global governance and international organizations as long as significant international actors avail themselves of the principles of international law.

5. As part of the social structure of the international system, they enable agency on behalf of the participating actors. This enabling function is part of their constitutive dimension by providing opportunities for the participating actors both on bilateral and systemic levels.

The authors examine also strategic partnerships in theoretical approaches of realism and constructivism. They define the origin of strategic partnership within the realist paradigm since strengthening states position has been at the care of the practice. However, the authors also highlight how the practice of strategic partnership has been evaluated as a social construction.[94]

The literature review about strategic partnership in this section reveals some common points particularly in conceptual definitions. These are (i) common interests/ goal of partners, (ii) longevity, (iii) equality between partners by their capabilities (symmetric relation), (iv) distinct incentives to distinguish strategic partner from others, (v) mutual benefits and (vi) state-centered logic. Thus, in the next section, I will apply these common points in assessing the strategic partnership between Turkey and Russia.

2.2.3 Strategic Partnership in the Case of Turkey and Russia

The idea of establishing a strategic partnership between Turkey and Russia was first voiced during Russian Prime Minsiter Chernomyrdin's visit to Turkey in December 1997.[95] Putin's letter to Turkish President Ahmet Necdet Sezer in 2000 also identified Turkey as a "strategic partner in the region".[96] In 2010, President Medvedev and Prime Minister Erdoğan gave utterance to establish the multidimensional strategic partnership.[97] Thus, developments of bilateral relations via establishing strategic partnership were evinced when we trace high-level contacts between two countries. In fact, Turkish policy makers have used the term more than their Russian diplomats and officials.[98]

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[94] Ibid.
[95] "Stratejik Ortaklık Önerisi", *Milliyet*, 17 December 1997.
[96] Çevikcan, Serpil; "Putin'den Ortaklık Teklifi", *Milliyet*, 27 May 2000.
[97] Kamalov, İ. (2010). Komşuluktan Stratejik İşbirliğine: Türk-Rus İlişkileri. *Ankara: ORSAM*.
[98] "Joint News Conference with President of Turkey Abdullah Gul", May 12, 2010 access on http://en.kremlin.ru/events/president/transcripts/7725 "Kremlin says Turkey apologized for shooting down Russian jet", June 27, 2016 access on https://www.reuters.com/article/us-russia-turkey-jet-idUSKCN0ZD1PR

When we consider six common points in strategic partnership literature, energy, trade and security in the region can be considered as the common goals of Russia and Turkey. When identifying them as potential partners, both Russia and Turkey can pursuit the convergence of interests. However, Turkey's commitments to the NATO alliance and its relations with the United States, which is also a NATO member, might be obstacle to give always priority to Russia as strategic partner in Turkish foreign policy. Besides, in literature, advanced institutionalization of mutual relations between partners on interstate and inter-human level was determined as necessary condition for a strong and long-time strategic partnership. However, except the HLCC (Turkish-Russian High Level Cooperation Council) established, there is no long-term experience of institutionalized relations between two countries. In fact, as mention before, rather than multiple channels in an interdependent relationship, even non-state actors' relations are limited by the influence of their respective governments as it was observed during the Russian trade sanctions in 2015. Further, the trust of societies to each other seems to be sensitive given the historical narratives that praise national pride in the political discourse.[99] Finally, according to the function of their economic activity within the context of available alternatives, economic interdependence between Russia and Turkey is identified as asymmetric (especially for energy). Thus, according to literature this asymmetric interdependence can be an obstacle to the emergence of a strong strategic partnership between Russia and Turkey. Therefore, we can be said that the extent of common interests in priorities of their foreign policy is important to establish strategic partnership and preserve its longevity.

[99] Erşen, E. (2017). Evaluating the Fighter Jet Crisis in Turkish-Russian Relations. *Insight Turkey*, *19*(4), 85-104.

2.3 Conclusion

In this section, I presented the historical background of and recent developments in bilateral relations between Turkey and Russia. After WWI, the bilateral relations starting with the Treaty of Friendship developed positively as a result of the Soviet support for the Turkish Independence War and early industrial development of the young Republic of Turkey until the WWII. However, there were divergence in the interests of the Soviet Union and Turkey in the historical context of post-WWII conditions. Turkey's threat perceptions changed as reaction to assertive foreign policy of the Soviet Union and its particular territorial demands from Turkey. Turkey decisively joined NATO alliance and followed an anti-Soviet orientation in 1950s in Turkish foreign policy. During the Cold War era, Turkey's pro-Western foreign policy did not affect the economic relations. In fact, particularly in the 1960s Turkey and the Soviet Union improved their economic relations. However, due to regional issues and domestic political affairs, rapprochement process halted during the last decades of Soviet Union.

After the dissolution of the Soviet Union, especially, with the Blue Stream Pipeline agreement in 1997, important steps were taken in energy field. According to Russian President's Putin's foreign policy strategy based on building good-neighborhood relations and partnerships, the political relations between Turkey and Russia enhanced gradually and the concept of 'partnership' was frequently started to be used during mutual high level visits.

However, during Putin's leadership increasing assertiveness in Russian foreign policy and the Russian military interventions in its post-Soviet influence sphere highlighted disagreements on several issues, while bilateral diplomatic relations also faced short-lived crisis between 2015 and 2016. Despite the negative atmosphere of the crisis, the energy imports from Russia continued to have the largest share in bilateral trade; while Turkey increased its cooperation with Russia over the Syrian conflict in the aftermath of rising security threats from the PKK related PYD/YPG forces and ISIL in Syria.

Within the conceptual framework of theoretical section, the interdependence between Turkey and Russia is defined as asymmetric interdependence rather than complex interdependence. Finally, according to the conceptual definitions of strategic partnership in the literature, I argue that the strategic partnership between Turkey and Russia cannot include all of the six common points in literature. Consequently, the historical context and recent developments in bilateral relations of Turkey with Russia suggests that three main issues (trade, energy and regional security) have been shaping the scope of common interests for the strategic partnership between them.

In the next chapter, I will examine the strategic partnership between Turkey and Russia through the principles of game theory. After presenting the how game theory and extensive form of games can be used in examining bilateral relations I will apply game theoretic method to analyze the sustainability of strategic partnership or sources of complex interdependence between Turkey and Russia. In addition, the chapter will give the possible equilibria according to preferences of players

CHAPTER 3

THE GAME MODEL FOR STRATEGIC PARTNERSHIP

In this chapter I apply the game model in terms of the development, construction and formation of the game to examine strategic partnership between Turkey and Russia. In addition, the chapter describes the process of building the game and possible equilibria according to preferences of players and analyses these equilibria. Finally, according to the game model developed, I propose two hypothesis for testing a possible strategic partnership between Turkey and Russia.

3.1 Why Game Theory?

Morrow (1994)[100] argues that game theory is an effective tool to analyze strategic interactions between countries, which have especially mutual interdependence. In a game, the outcome of a player's action affects not only that player but also other players in the game.[101] Strategic interdependence also highlights one side's decision influencing others before making a decision. So, countries can consider other's actions and possible outcomes like game theory models. However, a game model has some limitations in formulating and analyzing these interactions between actors as an analytical framework. For example, game theory's certain assumptions like rational action, which means players as rational actors determine their decisions through

[100] Morrow, J. D. (1994). *Game theory for political scientists* (No. 30: 519.83). Princeton University Press,.
[101] Carmichael, F. (2005). *A guide to game theory*. Pearson Education.

optimization simplify the complexity of reality.[102] But, with these certain assumptions game theory also simplifies the complexity of reality. [103]

Accordingly, we can analyze the strategic partnership between Turkey and Russia given the strategic interactions and the interdependence between them that forms a strategic puzzle in which one's action influences other's action like a game theory model. Such a game model provides us analyzing the preferences of actors, outcomes of their choices in a simple way. Hence, by using game theory, I formalize and construct a strategic partnership game model to examine the strategic partnership between Turkey and Russia. In addition, I analyze the influence of strategic partnership on improvement of relations and possibility for escalation of conflict.

3.2 Why Sequential Game Model rather than Static Game?

The strategic partnership game model in this research is designed as sequential game model, in which sequential moves of players occur, in contrast to static game model, in which the players have only one move as a strategy and act simultaneously without knowing actions of each other's (Brams, 1975).[104]

The sequential game models are presented in extensive form and "game theorists use the analogy of a tree when describing a game in extensive form. Each move corresponds to a point called a node where the tree branches. The root of the tree corresponds to the first move of the game. The branches at each node correspond to the choices that can be made at that move. The leaves of the tree correspond to the final outcomes of the game, and so we must say who gets what payoff at each leaf. We must also say which player moves at each node, and what that player knows

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[102] Güner, S., & Druckman, D. (2003). Oyun kuramı ve uluslararası politika. *METU Studies in Development*, *30*(2), 163-180.
[103] Yılmaz, E. (2009). Oyun Teorisi. *Literatür Yayınları, İstanbul*.
[104] Brams, S. (1975). Game Theory and Politics.

about what has happened so far in the game when making the move" (Binmore, 2007:37).[105] This type of game models allow us to consider all actions whether they occur or not; and the extended decision branches in the decision tree eases determining and analyzing non-credible commitments.[106]

Therefore, analyzing strategic interaction between Turkey and Russia through counterfactual reasoning is possible with a sequential game model in extensive form rather than a matrix game model.

3.3 Limitations of the Game-Theoretical Model

The game theoretical model has some limitations. First of all, the ranking of players' preferences and the mentality of the players are the determinative factors for the solution of the game.[107] Therefore, justifying the players' preference is important to not make a mistake misleading in the rest of the game. Secondly, it is not easy to create a game model including the all aspects and details of the interaction between the players. In other words, the game theory is not capable to include all detail information on reality, so perfect calculation of the pay-offs is difficult. Accordingly, the strategic partnership case for Turkey and Russia contains these limitations.

3.4 Building the Game

3.4.1 Players

As Mearsheimer (2013)[108] mentions states are the unitary actors as a single representative of society, politics and military for decision-making within the framework of realism. The literature review about strategic partnership in Chapter 2

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[105] Binmore, K. (2007). Game theory: a very short introduction (Vol. 173). Oxford University Press.
[106] Snidal, D. (2004). Formal Models of International Politics. In: D. Sprinz and Y. Wolinsky-Nahmias, ed., Models, Numbers, And Cases, 1st ed. Ann Arbor: University of Michigan Press.

[107] Güner, S., & Druckman, D. (2003). Oyun kuramı ve uluslararası politika. *METU Studies in Development*, *30*(2), 163-180.
[108] Mearsheimer, J. (2013). Structural Realism. In: T. Dunne, M. Kurki and S. Smith, ed., International Relations Theories: Discipline and Diversity, 3rd ed. Oxford: Oxford University Press, pp.71-88.

also underlined the state-centered logic in conceptual definitions. Thus, the set of players in this game are defined as two states: Turkey and Russia. Although, it is suggested that sub-state actors are also part of design making process, taking states as unitary rational actors provide simplicity for the game. In this model, both Turkey and Russia are seen as a possible challenger and a possible target.

3.4.2The Domain of the Model

The idea of establishing a strategic partnership between Turkey and Russia was first voiced during Russian Prime Minsiter Chernomyrdin's visit to Turkey in December 1997. Putin's letter to Turkish President Ahmet Necdet Sezer in 2000 also identified Turkey as a "strategic partner in the region." While President Medvedev and Prime Minister Erdoğan confirmed to establish the multidimensional strategic partnership in 2010. However, the sustainability of the strategic partnership requires further examination given the asymmetric interdependence between two countries in trade, energy and regional security relations. In order to analyze the strategic partnership between Turkey and Russia, this model covers the strategic interaction, common interests and interdependence between Turkey and Russia.

3.4.3 The Order of Moves

In this model, challenger makes the first move and both Turkey and Russia seen as a possible challenger and a possible target. Thus, via two game trees, the model takes both states' actions as first move in the game. In other words, while in one game tree, Russia acts as challenger and Turkey as target, in another game tree, Turkey acts as challenger and Russia as target.

3.4.4 Actions of Players

Players' actions are defined according to the concept of interdependence. The challenger wants something from the target and decides whether keep quiet and forgo or push the limits to obtain what it desires. Target, on the other hand, desires to sustain status quo. Therefore, challenger makes the first move by making a political demand with a threat of exiting from the strategic partnership. The target makes the second move in the game by rejecting the challenger's demand or complying with it. If it complies, the game ends; and if it rejects, the game continues with the third move of challenger by applying exit and demand with threat of military force or back down. If the challenger withdraws its demand, the game ends. But if the challengers applies exit from strategic partnership, the target has to choose again whether to reject or accept the challenger's demand. If the target accepts, the game ends; but if the targets rejects, the game results in an escalated political conflict such as threat or use of military force (i.e. closing Syrian air space to Turkish jetfighters or enforcing Turkish troops to leave some strategic zones in Syria), economic sanctions, cuts of energy exports.

3.4.5 Outcomes

There are five possible outcomes in this model. (i) Status Quo, which means that there is not a challenger and strategic partnership continues without any conflict; (ii) Limited Conflict, which reflects that due to the challenger's threat of exit, the target accepts the challenger's demand. So, the challenger gains the utility of its demand; (iii) Challenger Backs Down, which means challenger faces the audience cost by withdrawing its demand. (iv) Exit is the failure of the strategic partnership, which means the challenger exits from the strategic partnership and the target accepts the exit. (v) Escalated Political Conflict, which is the failure of using threat; and states enter into a serious political conflict. In other words, the challenger applies exit and demands with threat of military force or other economic sanctions, including cuts in energy exports to the target. And the target rejects the demand which in turn further escalates the conflict.

3.4.6 Preferences of Players

According to game theory, players' preferences influence decision choices. These preferences are divided as preferences over the outcome or the action. In this strategic partnership model, it is assumed that Russia and Turkey have preferences over actions, which means they choose the action resulting in higher utility as rational actors.

3.4.7 Information

"Games may usefully be divided into two classes. In games of perfect information, like chess, the players move alternately, and at each move a player is fully informed about the previous moves in the game. This is not the case in a game like poker, which is not a game of perfect information since a player does not know all the cards dealt to the other player(s)." (Brams, 1975:57-58).[109]The strategic partnership model in this research is designed as perfect information game in which the players always know everything that has happened so far in the game. In other words, they know actions and positions of each player, preferences, outcomes and payoffs of the game.

3.4.8 Payoffs

In any game, as numerical values or abstract symbols, payoffs represent the motivations of players. Payoffs may symbolize gain, utility and other continuous measures. In this game, payoffs are defined by using symbols at the first stage.

In the first step of the game, if the target complies with the challenger's demand, challenger gains the utility of its demand (U_{CH}) and target loses the utility (U_T). In the second step, the target rejects the demand; and if challenger withdraws its

[109] Brams, S. (1975). Game Theory and Politics.

demand, the challenger faces viewer cost (V_{CH}), while target gains viewer award (V_T).[110] This cost and award can be domestic and international.

For example, due to the leaders' failure in foreign policy, the challenger may faces loss of confidence in domestic politics or its actions in other political areas can be perceived as bluffing by other countries. Similarly, due to the leader's foreign policy skills, the state of target may be empowered domestically and internationally.[111]

In the third step, the challenger applies exit from the strategic partnership to obtain its demand. If the target complies with the demand, the target not only loses the utility (U_T), but also faces an exit cost of strategic partnership (E_T). The challenger, on the other hand, gains the utility (U_{CH}) and faces an exit cost of strategic partnership (E_{CH}).

In the final step, although the strategic partnership was ended, the target rejects the challenger's demand, and they face an escalated political conflict including costlier bargaining tools. If challenger wins with "p"[112] probability, it gets the utility of demand (U_{CH}) but the challenger also suffers with exit cost (E_{CH}) and cost of conflict (M_{CH}). And the target suffers with the utility (U_T), exit cost (E_T) and military cost of conflict (M_T). If challenger loses with (1-p) probability, both the challenger and the target face exit cost (E) and military cost of escalated political conflict (M).

3.5 The Game Tree

In this section, I show the strategic partnership game tree as a general challenger-target game (see Figure 5).

[110] Fearon, J. D. (1994). Signaling versus the balance of power and interests: An empirical test of a crisis bargaining model. *Journal of Conflict Resolution*, *38*(2), 236-269.
[111] Smith, A. (1996). Diversionary foreign policy in democratic systems. *International Studies Quarterly*, *40*(1), 133-153.

[112] p is positive real number between 0 and 1.

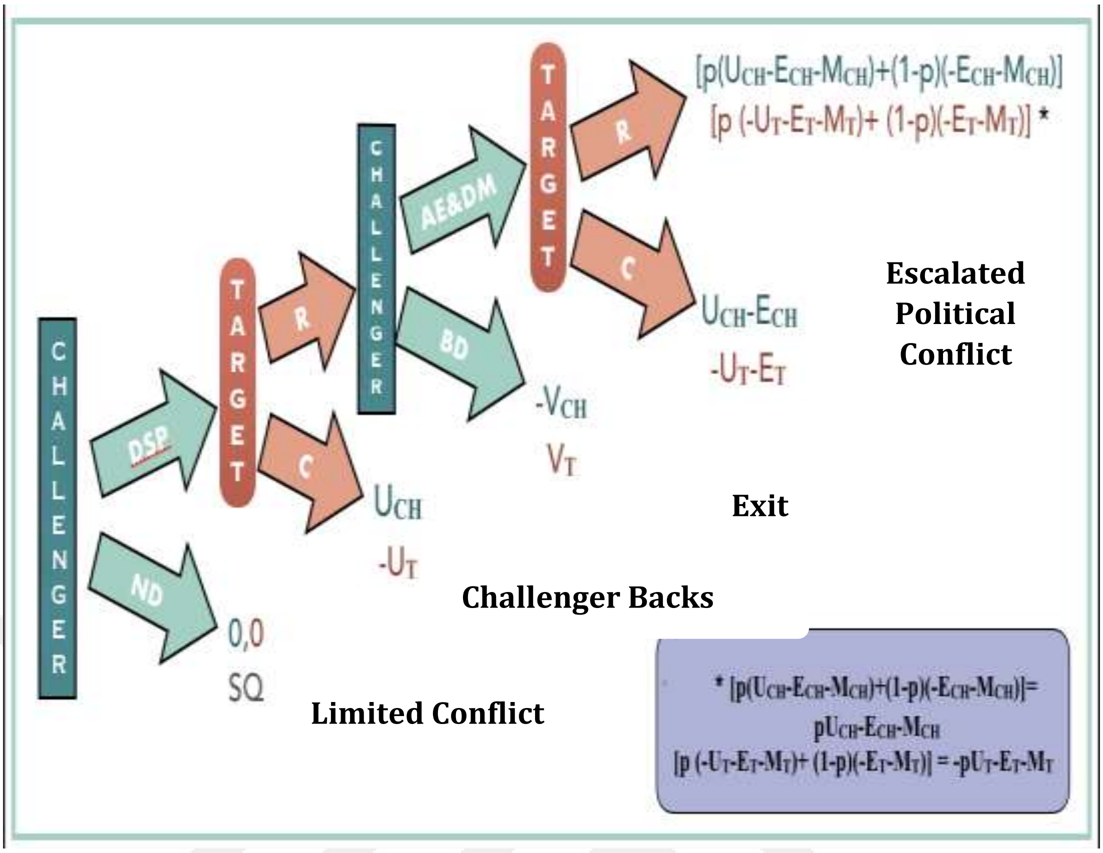

Figure 5: General Challenger-Target Game for Strategic Partnership[113]

3.5.1 Notations for Game Tree

ND: Not demand.

DSP: Demand by threating to exit from strategic partnership.

C: Comply with the demand.

R: Reject the demand.

BD: Back Down.

AE&DM: Apply exit and demand with threat of military force.

U_{CH}: Value of demand for challenger

U_T: Value of demand for target.

V_{CH}: Viewer cost for challenger.

[113] Note: Payoffs listed as Challenger first and Target second.

V_T: Viewer award for target.

E_{CH}: Exit cost of strategic partnership for challenger.

E_T: Exit cost of strategic partnership for target.

M_{CH}: Military Cost to challenger for escalated political conflict.

M_T: Military Cost to target for escalated political conflict.

p: Probability of challenger winning dispute.

1-p: Probability of target winning.

SQ: Status quo

3.6 Action Profile of the Players

Set of Challenger Actions: as the player moving first, there are two elements in the set of challenger action; **DSP:** Demand with threating to exit from strategic partnership and **AE&DM:** Apply exit and demand with threat of military force.

Set of Target Actions: as second player to react challenger actions, there are also two elements in the set of target action; **C:** Comply with the demand and **R:** Reject the demand.

3.7 The Equilibria Table

Concerning the actions and strategies of two players, possible equilibria are like Table 4.

Table 4: Equilibria for Game

#	Challenger	Target
1 (Status Quo)	ND	Not action
2 (Limited Conflict)	DSP	C
3 (Challenger Back Down)	DSP,BD	R
4 (Exit)	DSP, AE&DM	R,C
5 (Escalated Political Conflict)	DSP, AE&DM	R,R

3.8 Solution of the Game

When players make a decision in a sequential game model, they start by looking at all the possible outcomes of the game, Then, they ask themselves which moves their competitor is most likely to make, which is called as "look forward and reason back" in the game theory (Dixit & Nalebuff, 1991: 33).[114] All players assume that each player are rational, so the main aim of them is choosing the best option(s).

The solution of this strategic partnership model is done by using backward induction method which is "the process of working backward through a game from the outcomes to the initial move, doubling the lines representing the best moves at each decision node"(Binmore, 2007: 42).[115] In other words, we start from the end of the game tree and go back to the starting point.[116]

[114] Dixit, A., & Nalebuff, B. J. (1991). Thinking strategically: The competitive edge in business. *Politics, and Everyday Life, WW Norton*.
[115] Binmore, K. (2007). Playing for real: a text on game theory. Oxford university press.
[116] I assume that all values in payoffs are greater than or equal to zero.

First, we assume that target has two options as response to challenger's demand; comply or reject. Target suffered ($-U_T-E_T$) if complies and get ($-pU_T-E_T-M_T$) if rejects. Since the target is rational;

Target prefers complying with demand only if

$-U_T-E_T < -pU_T-E_T-M_T$, $p > (M_T/ U_T) -1$.

Target rejects if it is contrary which is $p < (M_T/ U_T) -1$.

Solving for U_T produces threshold value; U_T*

$U_T* = M_T / (1-p)$ and the target rejects the challenger's demand when $U_T > U_T*$ and complies when $U_T < U_T*$.

Secondly; as next step I examine the challenger's second move by considering target's action.

Case 1: $U_T < U_T*$ (Target complies).

Under this situation, challenger faces two options: apply exit or back down, so challenger gets $U_{CH} -E_{CH}$ or $-V_{CH}$, so we can be said that unless $V_{CH} > E_{CH}-U_{CH}$, the challenger choose to exit from strategic partnership.

Case 2: $U_T > U_T*$ (Target rejects).

Under this situation, challenger faces a choice between backing down or entering into escalated political conflict with target, so challenger gets, $-V_{CH}$ or $pU_{CH}-E_{CH}-M_{CH}$.

Since the challenger is rational;

Challenger back down if $pU_{CH}-E_{CH}-M_{CH} > -V_{CH}$

From this solving; the threshold for viewer cost is

$$V_{CH}^{*}=E_{CH}+M_{CH}-pU_{CH}$$

Thus, if $V_{CH}^{*}> V_{CH}$, the challenger backs down. If $V_{CH}^{*}<V_{CH}$, the challenger exits from the strategic partnership.

Thirdly; under backward induction method I look at the first move of target considering the payoffs of challenger' second move.

There are three cases while target makes a decision on its action.

Case 1: $V_{CH}^{*} >V_{CH}$ (Challenger backs down).

For target, $V_T > -U_T$ for all values of V_T and U_T, so target prefers to reject challenger's demand and challenger backs down as response.

Case 2: $V_{CH}^{*}<V_{CH}$, $U_T< U_T^{*}$ (Challenger exit and target comply)

In order to not face exit cost, target prefers to comply also as first move like its second move.

Case 3: $V_{CH}^{*}<V_{CH}$, $U_T>U_T^{*}$ (Challenger exit and target reject)

There are two option for target; comply or reject and face escalated political conflict.

Target prefers to reject if $-U_T > -pU_T-E_T-M_T$

Solving for E_T produces threshold value; E_T^{*}

$$E_T^{*}=(1-p)U_T - M_T$$

If $E_T^{*} > E_T$, target rejects the demand. If $E_T^{*} < E_T$, target complies the challenger's demand at its first opportunity.

Thus, this exit cost threshold is a function based on the probability of target's win in the escalated political conflict.

Fourthly, as final step of backward induction, I analyze the first move of challenger.

In this step, challenger has to consider three scenarios.

Case 1: $E_T > E_T$* (Target complies at its first move)

Under this situation, challenger always prefers to demand rather than continue at the status quo.

Case 2: $E_T < E_T$*, $V_{CH} < V_{CH}$* (Target rejects and challenger backs down)

In order to not face a viewer cost, challenger always prefer to continue at status quo.

Case 3: $E_T < E_T$*, $V_{CH} > V_{CH}$* (Target rejects, challenger exits and target rejects)

If the challenger makes a demand, the conflict results in $-pU_{CH}-E_{CH}-M_{CH} > 0$

As a result, threshold for exit cost of challenger became;

$$E_{CH}^* = pU_{CH}-M_{CH}$$

If $E_{CH}^* > E_{CH}$, challenger makes a demand and face escalated political conflict.

If $E_{CH}^* < E_{CH}$, challenger is deterring from making demand and status quo continues.

3.9 Analysis

According to backward induction in this game, we can be said that there are three main equilibria. First one is <u>prohibitor equilibria</u> in which the challenger's cost of exit from strategic partnership deters the challenger from demanding. Second equilibria is <u>bargaining power equilibria</u> which means due to the exit costs, strategic partnership provides bargaining between players and target accepts the challenger's demand. Finally, due to the failure of strategic partnership, <u>a crisis equilibria</u> is arisen.

In the framework of these three equilibria, it is clear that exit cost is main parameter for the solution of game. Thus, threshold of exit cost (as the level of exit cost beyond which player cannot tolerate exit) sets the tone of game. The following equations identify the threshold of exit cost for challenger and target.

$$E_{CH}^{*} = pU_{CH} - M_{CH}$$

$$E_{T}^{*} = (1-p)U_{T} - M_{T}$$

According to these equations, (i) the value of demand for challenger and target, (ii)the military cost of political conflict and (iii) probability of success for challenger in the event of escalated political conflict are important factors to determine the thresholds of exit cost. While I hold all other factors as constant, the effects of these three factor on the level of threshold are described in Table 5.

Table 5: Effects of Indicators for Exit Cost Thresholds

Factors	Effect of Factors	Meaning
$U_{CH}\uparrow$	$E_{CH}^*\uparrow$	Increase in the value of demand for challenger means that challenger is willing to tolerate higher exit cost of strategic partnership to obtain demand.
$U_T\uparrow$	$E_T^*\uparrow$	Increase in the value of demand for target means that target is willing to tolerate higher exit cost of strategic partnership to avoid demand of challenger.
$M_{CH}\uparrow$	$E_{CH}^*\downarrow$	As the military cost of political conflict for challenger increases, exit cost threshold for challenger decreases.
$M_T\uparrow$	$E_T^*\downarrow$	As the cost of political conflict for target increases, exit cost threshold for target decreases.
$p\uparrow$	$E_{CH}^*\uparrow$, $E_T^*\downarrow$	As the probability of success for challenger in the event of escalated political conflict is high, challenger is willing to tolerate higher exit cost of strategic partnership to obtain demand, but target's exit cost threshold decreases.

In summary, for both states the value of demand has positive correlation with their thresholds of exit cost. In other words, the higher the value of demand, the challenger is more willing to suspend the strategic partnership and also the target is more tolerant to the exit from strategic partnership. Moreover, the cost of escalated political conflict has negative correlation with thresholds of exit cost. It means that a potential military conflict with high casualties is likely to result in sustaining the strategic partnership for both states. Lastly, the probability of success for challenger in the event of escalated political conflict has opposite influence on states. If we consider this probability as a sign of states' relative power level, power inequality between states decreases the ability of weak side to tolerate exit cost while makes the more powerful side more ready to tolerate higher exit cost.

These equations on threshold of exit cost for challenger and target provides three equilibria;

(i) Prohibitor equilibria: when the target's exit cost is less than its threshold and challenger's threshold is higher than its threshold ($E_T < E_T^*$, $E_{CH} > E_{CH}^*$), the challenger is prevented from demanding by the influence of strategic partnership

(ii) Bargaining power equilibria: when the exit cost is more than its threshold ($E_T^* < E_T$), target complies the demand of the challenger. In other words, the target's level of interdependence to challenger drives target to do a bargain.

(iii) Crisis equilibria: when exit costs of both challenger and target are less than the thresholds ($E_T < E_T^*$, $E_{CH} < E_{CH}^*$), conflict between them reach a critical step.

Table 6: Four Possible Combination of Exit Cost and Three Equilibria

Equilibria	Exit Cost	Outcome
Prohibitor	$E_T < E_T^*$, $E_{CH} > E_{CH}^*$	Status Quo
Bargaining Power	$E_T^* < E_T$, E_{CH} > or < E_{CH}^*	Low-level conflict
Escalation	$E_T < E_T^*$, $E_{CH} < E_{CH}^*$	High-level conflict

According to the arguments of complex interdependence and its four dimensions presented in chapter 2, these three equilibria show first how the actors' politically perceive the initial exit cost in terms of sensitivity, its sources and rationally calculate threshold for the exit cost (the level of symmetry in interdependence) from the interdependence or strategic partnership between two actors. For example, while prohibitor equilibria verifies the argument that interdependence decreases conflict, bargaining power equilibria is not exactly compatible with the argument that interdependence leads conflict. The model shows that interdependence may permit low-level conflict. Finally, the crisis equilibria shows that interdependence is not always enough to retrain conflict.

Accordingly, two hypotheses can be produced to test the sustainability of the strategic partnership between Turkey and Russia based on these three equilibria and the assumptions about assessing the initial exit costs from the interdependence in the game.

Hypothesis 1: When the target's exit cost from the strategic partnership between Turkey and Russia is high, then a low level of conflict will be expected.

Hypothesis 2: When the exit cost from the strategic partnership between Turkey and Russia is high for both the target and the challenger, then the possibility of higher-conflict will be less.

In sum, after defining the game tree, this chapter described the possible equilibria according to both players' preferences and solved the game by using backward induction. Accordingly, I propose two hypotheses for examining the sustainability of the strategic partnership between Turkey and Russia. In the next chapter, I will consider the four dimensions of interdependence within the historical context and recent developments described in chapter 2 as factors that can drive up the cost of exit in the game model described in this chapter. Thus, I will test the proposed hypotheses in the next chapter.

CHAPTER 4

ASSESSING THE GAME MODEL FOR STRATEGIC PARTNERSHIP BETWEEN TURKEY AND RUSSIA

In the previous chapters, strategic partnership as a function of interdependence is highlighted and in Chapter 3, a game model is developed to see how this interdependence can function to sustain or suspend the strategic partnership. I propose two hypotheses for examining the sustainability of the strategic partnership between Turkey and Russia. In this chapter, I evaluate the possible demands of two states to act as a challenger by considering four dimensions of interdependence within the historical context and recent developments described in chapter 2. I focus on resources and cost (particularly sensitivity in the short & mid-term) dimensions of interdependence as factors that can drive up the cost of exit in the game model.

In chapter 2, I showed that the relation between Turkey and Russia has advanced on a regular basis since mid-1990s. Even though they had previously seen each other as rivals in the region, their perceptions have been changed and they gravitated to establish a strategic partnership. However, it doesn’t mean that they have a harmony of interests to boost full cooperation over different regional issues. My review of the historical background of relations between Turkey and Russia presented that trade (especially oil and natural gas imports from Russia) and regional security challenges are the backbones for their interests. Therefore, in this chapter possible demands of these two states to act as a challenger is limited within the framework of energy and regional security.

4.1 Turkey as a Challenger

Within the framework of energy and regional security, we can be said that there are possible demands that can set Turkey as challenger to use its leverage or bargaining power in the current strategic partnership. The potential demands of Turkey are specifically related to its natural gas imports and the conflict in Syria.

4.1.1 Demands based on Natural Gas Trade

While Turkey's primary energy supply is based on imports, in which about 74% consists natural gas and oil. The distribution of Turkey's natural gas imports by countries shows that Russia preserves the highest share in Turkey's natural gas imports between 2005 and 2017 (see Figure 6).

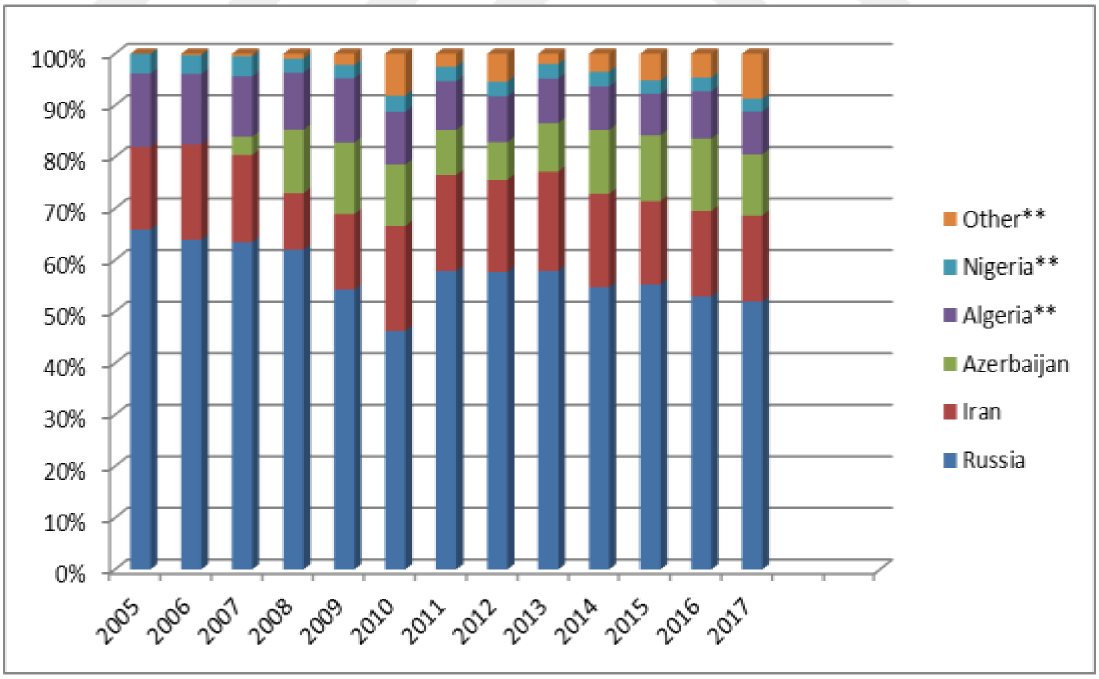

Figure 6: Turkey's Natural Gas Imports by Countries (million cubic meters)

Source: Energy Market Regulatory Authority's Natural Gas Sector Reports from 2005-2017.

The first natural gas agreement between Russia and Turkey signed in 1986 for the Western Route. On December 15, 1997 they signed a second intergovernmental agreement, which paved the way for a submarine pipeline (Blue Stream Pipeline) to deliver Russian natural gas to Turkey across the Black Sea bypassing third countries. In 2001, construction of the Blue Stream pipeline started and the gas flow began in 2003. The full pipeline capacity is 16 billion cubic meters of gas annually. It is important to note, the Blue Stream has conveyed the gas volumes equal to its full capacity for most of the time since the inauguration of the pipeline in 2003.[117] Moreover, the current gas contracts with Russia for the Blue Stream pipeline will expire in 2025[118] and Turkish companies and Gazprom will negotiate for a new contract. The capacity of Blue Stream is crucial in the lack of alternative gas volume equal to 16bcm/year. Therefore, we can be said that Turkey's energy security in terms of accessibility and affordability require the renewal of the contract.

There are three important issues that BOTAŞ (as the state owned pipeline company) would like to address during negotiations and these are (i) price, (ii) take or pay and (iii) destination clause.[119]

i) Price:

In 2015, Botas and Gazprom negotiated over a promised 10.25% discount on the standard gas contract price. However, at that time no agreement could be achieved because Russia had made the discount conditional upon the signing of an agreement for the Turkish Stream pipeline project.[120] It is most likely that BOTAŞ would like to

117 Gazprom, Blue Stream, available at http://www.gazprom.com/projects/blue-stream/

118 Rzayeva, G. (2018). Gas Supply Changes in Turkey. Oxford Institute for Energy Studies. p.8 https://www. oxfordenergy. org/wpcms/wp-content/uploads/2018/01/Gas-Supply-Changes-in-Turkey-Insight-24. pdf. http://turkishpolicy. com/article/773/tanap-and-the-semi-encirclement-of-iranprogress-and-paradoxes-in-turkeys-energy-diplomacy

119 Ibid.

120 Hürriyet Daily News, 11.9.2015: "Turkey, Russia 'freeze Turkish Stream talks". Ankara: Hürriyet

review pricing to obtain an efficient discount in the new contract. We can be said that, Turkey may propose reducing the level of price close to the price level of Azeri gas during the negotiation process.[121]

ii) Take or Pay

In the energy sector, take-or-pay clauses are common for the long term contracts (LTCs) due to the huge overhead costs of supplying energy units. It means that buyer of a supplier has the obligation to pay the price corresponding to certain pre-agreed quantities of energy units (such as natural gas, crude oil) no matter the agreed quantity is delivered or not.

This take or pay regulation is included in Turkey's all LTCs for its pipeline gas imports. On the other hand, less consumption of natural gas is predicted by BOTAŞ for the following years in Turkey since there have been projects to diversify Turkey's energy supplies.[122] Therefore, during the negotiations, Turkey may want to exclude the "take or pay" clause in the new contract.

iii) Destination Clause

Destination clause in contracts means that buyer does have no right to re-export products to another consumer except what is agreed in bilateral agreement. Turkey also has not been able to resell natural gas because of destination clauses in the gas contract with Russia.[123] However, Turkish government has a desire to become a gas exporting country in the following ten years, so with a high probability Turkey may attempt to take out this condition in the new contracts.

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[121] Rzayeva, G. (2018). Gas Supply Changes in Turkey. Oxford Institute for Energy Studies.
[122] Rzayeva, G. (2017). Turkey's gas demand decline: reasons and consequences. *Oxford Institute for Energy Studies*,
[123] Rzayeva, G. (2018). Gas Supply Changes in Turkey. Oxford Institute for Energy Studies. p.10

4.1.2 Demands based on Syria

The effects of Syrian crisis on domestic developments and Turkey's regional position make the Syria as a key issue for policy-makers. Çelikpala (2018)[124] states that for Turkey a long list of priorities exists including the re-emergence of the PYD/YPG/PKK as terrorist threats from Syria, the refugees' uncertain situation, legitimacy of the al-Assad regime and the future of the pro-Turkish opposition in Syria.

However, when we compare Russia and Turkey's Syria policy, we see some fundamental differences. First, Russia's PKK / PYD policy includes serious dilemmas. Russia avoids recognizing the PKK as a terrorist organization and in this context leaves the door open for PYD / YPG. On the other hand, Russia seems not willing to jeopardize bilateral relations and Russia maintains the progress achieved with Turkey in Astana and Sochi process, Russia takes also cooperative actions to lessen Turkey's security concern about PKK / PYD.[125] Russia's attitude towards Turkey's military intervention into Syria known as the Operation Olive Branch is an example of Moscow's willing to maintain Turkey's cooperation in Syria. Nevertheless, after Turkey's Operation Olive Branch Afrin, which resulted in controlling Afrin, Russia opposed Turkey's operation to be expanded to Tel Rifat.[126] Accordingly, in the following years Turkey may demand a support from Russia to hinder emergence of an autonomy as Kurdish region in Syria.

Second, Turkey and Russia have a different approach about the future government of Syria where to include whether or not the Assad administration and opponents.

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[124] Çelikpala, M. (2018). Russia's Policies in the Middle East and the Pendulum of Turkish-Russian Relations. *RUSSIA IN THE MIDDLE EAST*, 105-130.
[125] Ozan, E. (2019, April 18). The Future of Turkish-Russian Cooperation in Syria. Retrieved from https://ankasam.org/en/the-future-of-turkish-russian-cooperation-in-syria/
[126] Ergin, S. (2018, August 3). Rusya Tel Rifat'ta Türkiye'yi duymazdan mı geliyor. Retrieved from http://www.hurriyet.com.tr/yazarlar/sedat-ergin/rusya-tel-rifatta-turkiyeyi-duymazdan-mi-geliyor-4091669

Ankara is demanding to adopt a democratic constitution, which will refuse to recognize Assad as a legitimate leader and ensure that the opposition has a say in the country's administration. On the contrary, The Moscow administration wants Assad to be recognized as the legitimate leader of Syria and that all the armed opposition should give up their weapons and seek ways to participate in the elections.[127] Turkey does not want to leave Free Syrian Army to the mercy of Assad. Thus, Turkey tries to establish a system where opponents will have assurances against the Assad administration. [128] Accordingly, in the following years Turkey may demand a support from Russia for removal of Assad in the country's administration.

4.2 Russia as a Challenger

There are also possible demands that can set Russia as challenger. These demands are considered specifically related to energy trade and the conflict in Syria.

4.2.1 Demand about Energy Trade

4.2.1.1 Price and Take or Pay Clause

During renegotiations of the current gas contracts for the Blue Stream pipeline which will expire in 2025, Russia may demand new regulations strengthening its position in terms of price, take or pay clause. On the contrary to Turkey, Russia may want to increase the gas price and to sustain "take or pay" clause.

4.2.1.2 The Turkish Straits

The Turkish Straits have pivotal importance for maritime transportation involving Mediterranean Sea, Sea of Azov, Aegean Sea and Black Sea. Istanbul and Dardanelles (Çanakkale) Straits are the main shipment route of Russian oil through

[127] Çelikpala, M. (2018). 5. Russia’s Policies in the Middle East and the Pendulum of Turkish-Russian Relations..
[128] "Turkey’s Approach to the Syrian Conflict". Retrieved from http://www.mfa.gov.tr/relations-between-turkey–syria.en.mfa

the Black Sea. Every year million tons of oil and petroleum products are shipped through the Straits. Therefore, any possible closure of the Straits negatively affects oil shipments from Russia. In other words, the Turkish Straits play a crucial role in terms of accessibility of Russian oil and gas trade to its export markets. Accordingly, considering the intense maritime traffic and trade capacity through the Turkish Straits, Russia may demand more advantageous energy transition from the Straits.

4.2.2 Demands based on the Conflict in Syria

During the Cold War years, Syria has been important for Russia and although Russian influence in Syria declined after Cold War, Russia has retained its naval supply base in Tartus.[129] In the aftermath of the political movements known as the Arap Spring, Russia continued its support to the Assad regime and their ties strengthened. In the context of Russian failure in Libya, Russia preferred to take a crucial role in Syria to show Russian power. [130] Russia expanded its existing naval base in Tartus and established an important air base in Hmeymim near Latakia in Syria. Accordingly, although Turkish officials are trying to keep Russia on their side in Syria, Russia may demand from Turkey to accept the legitimacy of Assad regime given its strategic interests, such as military bases in Syria.

4.3 Exit Cost of Strategic Partnership for Turkey and Russia

In Chapter 2, I identified three common interests for the interdependence between Turkey and Russia. These are energy, trade and security, which have paved the way for the strategic partnership between two states. Therefore, I will consider these three factors to estimate exit cost of strategic partnership between Turkey and Russia.

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[129]Çelikpala, M. (2018). Russia's Policies in the Middle East and the Pendulum of Turkish-Russian Relations. p. 112

[130] Ibid.

Two variables are important to assess the cost of strategic partnership, particularly for energy trade; asset specificity and market structure. Williamson (1996)[131] defines asset specificity as "the degree to which an asset can be redeployed to alternative uses and by alternative users without sacrifice of productive value" (p.59). Further, Hirchman (1945)[132] argues that "mobility of resource" is important for the vulnerability of trade partners because immobile resources make states more vulnerable and cause high adaptation cost for a potential change. Accordingly, pipeline-bounded gas imports from Russia is important for asset specificity in energy trade. Figure 7 shows that Turkey's electricity production highly depends on natural gas in which approximately 90 % is pipeline bounded imports.[133]

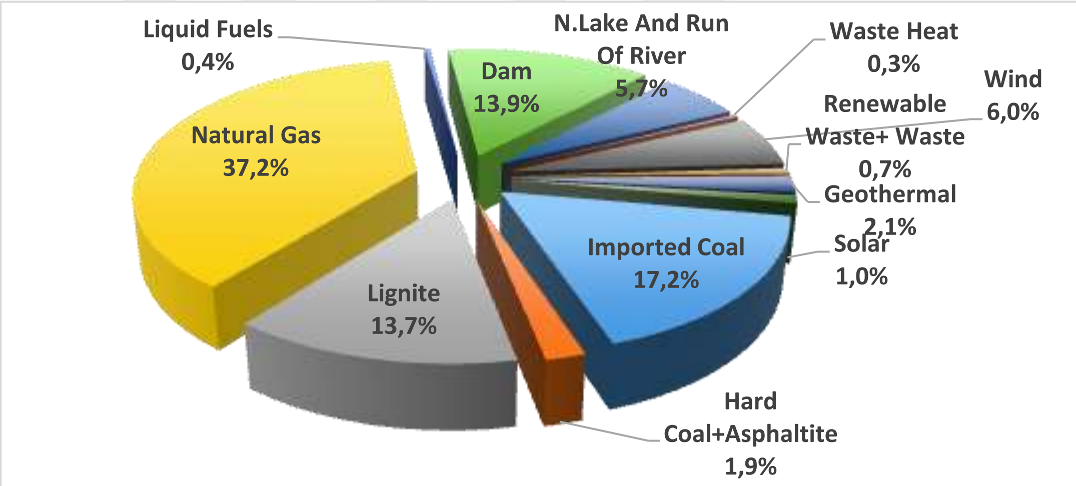

Figure 7: The Distribution of Turkey's Gross Electricity Generation by Energy Resources in 2017

Source: TEIAŞ (Turkish Electricity Transmission Cooperation)

Therefore, the volume of gas traded via the Blue Stream pipeline (16bcm/year) makes the asset specificity of this infrastructure highly valuable for Turkey. Unless Turkey builds new infrastructure for gas imports and/or diversifies its energy mix in

[131] Williamson, O. E. (1996). The mechanisms of governance. Oxford University Press.
[132] Hirschman, A. O. (1945). National power and the structure of foreign trade. University of California Press.
[133] Rzayeva, G. (2018). Gas Supply Changes in Turkey. Oxford Institute for Energy Studies.

power generation, the gas imports from Russia can be considered with high adaptation cost to end the strategic partnership. Moreover, although Turkey tries to decrease the share of gas in the energy mix, building new projects such as the Akkuyu Nuclear reactor and the Turkish Stream natural gas pipeline increases the Turkey's energy dependence on Russia.

Crescenzi (2005)[134] defines the market structure as "the degree which one state can turn to other suppliers or consumers in the global market for goods, service and market access withheld by another state imposing economic exit" (p.119). Thus, we can be said that a market which can have accessible substitutes would have lower exit cost. The accessibility of substitutes especially in energy market suggests high exit cost in short-term for import dependent countries which do not have a balanced diversification of suppliers and energy resources. In summary, Turkey's cost seems higher in short-term since it cannot find cheaper substitutes for gas in short-term in electricity production. Russia, on the other hand, also cannot tolerate loss of its revenue from gas imports in the short-term given higher share of gas exports in Russia' total revenue and Russian total export (see Table 7).

[134] Crescenzi, M. J. (2005). Economic interdependence and conflict in world politics. Lexington Books.

Table 7: The Significance of Oil and Gas Exports to Russian Economy

Year	Share of Oil and Gas in Russian Exports (As a percentage of total export)	Share of Oil and Gas in Russia's Budget Revenues (As a percentage of total revenue)
2015	62 %	43 %
2016	62 %	36 %
2017	63 %	40 %
2018*	63 %	46 %

Source: Calculated based on the data from Russian Customs Service and Finance Ministry

* Preliminary data

Nevertheless, it is important to quantify the abilities of states for adjusting to change in energy trade and in total trade between them as a result of exit from strategic partnership. To calculate trade share, I use the following equation,

$$\text{Trade Share}_{XY} = \text{Dyadic Trade}_{XY} / \text{Total Trade}_{X}$$ [135]

*Dyadic trade is the total trade between state X and Y.

However, trade share is not enough to see the exit cost because high trade share does not always mean high exit economic cost. For example, if trade share is low and trade elasticity is inelastic, exit can be costly or if trade share is high and trade elasticity is elastic, exit cost will not be so high. Therefore, to evaluate the sensitivity of state to change, trade elasticity is crucial.

Moreover, the exit cost in terms of the security dimensions in the strategic partnership should be measured. However, the threat perceptions of states are

[135] Barbieri, K. L. (1996). Economic interdependence and militarized interstate conflict, 1870-1985.

difficult to measure. Therefore, I will limit the calculation of exit cost by change in the military expenditures. No matter what the threat perceptions are, when one of the parties in the strategic partnership challenge with potential demands listed in the previous section, the target state may have to tolerate the demand. Because the high probability of success for challenger in the event of escalated political conflict that can involve use of force (military power) or threat of force, would make the high cost of ending strategic partnership tolerable for challenger and intolerable for target.

4.3.1 Exit Cost of Strategic Partnership for Turkey

I used the trade values from Turkish Statistical Institute (TÜİK) and United Nations Comtrade database to calculate Turkish-Russian trade share in terms of bilateral trade (export and import) and share in total trade. Table 8 shows that bilateral trade shares in total trade are much more for Turkey.

Table 8: Bilateral Trade between Turkey and Russia (2012-2017)[136]

Years	Turkey's export to Russia volume		Turkey's import from Russia volume		Total trade between Turkey and Russia			Trade Balance
	Volume (thousand USD)	Share in the Total Exports of Turkey (%)	Volume (thousand USD)	Share in the Total Imports of Turkey (%)	Volume (thousand USD)	Share in the Total Trade of Turkey (%)	Share in The Total Trade of Russia (%)	Turkey's export to Russia/Turkey's Import from Russia
2012	6,680,777	4.38	26,625,286	11.26	33,306,063	8.56	3.96	0.250919
2013	6,964,209	4.59	25,064,214	9.96	32,028,423	7.94	3.80	0.277855
2014	5,943,014	3.77	25,288,597	10.44	31,231,611	7.81	3.97	0.235008
2015	3,588,331	2.49	20,401,757	9.84	23,990,088	6.83	4.55	0.175883
2016	1,733,035	1.22	15,162,363	7.63	16,895,398	4.95	3.61	0.114298
2017	2,734,366	1.74	19,514,094	8.34	22,248,460	5,69	3.79	0.140123

Source: Calculated based on TUİK and United Nations Comtrade Database.

[136] With the approximately 30 % share in the total trade of Turkey, EU is the biggest trade partner of Turkey and Russia is second in 2017. With the approximately 35 % share in the total trade of Russia, EU is also the biggest trade partner of Russia but Turkey is 9th in 2017. These ranking highlights the importance of Russia for Turkey as a trade partner. Source: Eurostat.

However, to evaluate the sensitivity of these values, I looked at bilateral trade values by sectors. Table 9 demonstrates that fruits (20%), machinery (11%) and vehicles (10%) are the top three export products of Turkey to Russia. In terms of elasticity, we can be said that majority of exported products have high elasticity (except iron-steel products), which makes the exit cost in trade lower for Russia.

Table 9: Turkish Export products to Russia structure (2016)

Category	Value (million USD)	Share in the total export to Russia (%)
Edible fruits, nuts, peel of citrus fruit, melons	344.01	20
Machinery, nuclear reactors, boilers	185.83	11
Vehicles other than railway, tramway	170.24	10
Electrical, electronic equipment	93.75	6
Plastics	86.31	5
Articles of apparel, not knit or crocheted	57.60	3
Articles of iron or steel	55.23	3

Source: United Nations Comtrade Database.

On the other hand, Table 10 includes the list of Turkish import products from Russia. Mineral fuels and oils account more than half of total Turkey's import from Russia. With 15% , Iron and steel also have high share in total trade. In terms of market structure, accessible substitutes for mineral fuels and oils are very limited in short-term in an affordable way, which makes higher exit cost in trade for Turkey.

Table 10: Turkish import from Russia structure (2016)

Category	Value (million USD)	Share in the total export to Russia (%)
Mineral fuels, oils, distillation products	8,45	56
Iron and steel	2,24	15
Animal, vegetable fats and oils, cleavage products	728.73	5
Aluminum	626.85	4
Cereals	598.33	4
Copper	511.09	3
Fertilizers	271.98	2
Source: United Nations Comtrade Database.		

In terms of the security dimension in the strategic partnership, Turkish military expenditure as a percentage of GDP is 2.18 for the year of 2017, while Russian military expenditure as a percentage of GDP is 4.27 for the year of 2017. [137] With negative effects of exit from trade in strategic partnership with Russia, increase in military spending will become even more costly for Turkey. In addition, according to the 2019 Military Strength Ranking done by GlobalFirepower (GFP)[138], Turkey ranks 9th while Russia ranks 2nd. Accordingly, it is clear that the probability of success for Russia in the event of escalated political conflict involving use of force

[137] Stockholm International Peace Research Institute (SIPRI), Yearbook: Armaments, Disarmament and International Security. Available at: https://data.worldbank.org/indicator/MS.MIL.XPND.GD.ZS?contextual=default&end=2017&locations=TR-RU&start=2017&view=bar

Military expenditures data from SIPRI are derived from the NATO definition, which includes all current and capital expenditures on the armed forces, including peacekeeping forces; defense ministries and other government agencies engaged in defense projects; paramilitary forces, if these are judged to be trained and equipped for military operations; and military space activities.

[138] GFP ranking is based on each nation's potential war making capacity across land, sea and air fought with conventional weapons. Available at https://www.globalfirepower.com/countries-listing.asp

(military power) or threat of force is higher than Turkey's probability of success, which makes the cost of exit from strategic partnership more intolerable for Turkey.

4.3.2 Exit Cost of Strategic Partnership for Russia

Table 8 and 9 show that the bilateral trade share of Turkey in Russia's total export is not that high. Further, Russia's imported products from Turkey are not considerably inelastic for Russia. Thus, Russia has a lower exit cost for trade in strategic partnership. Nevertheless, it should be noted that Turkey ranks as the 5th largest export market for the Russian economy (see Figure 8).

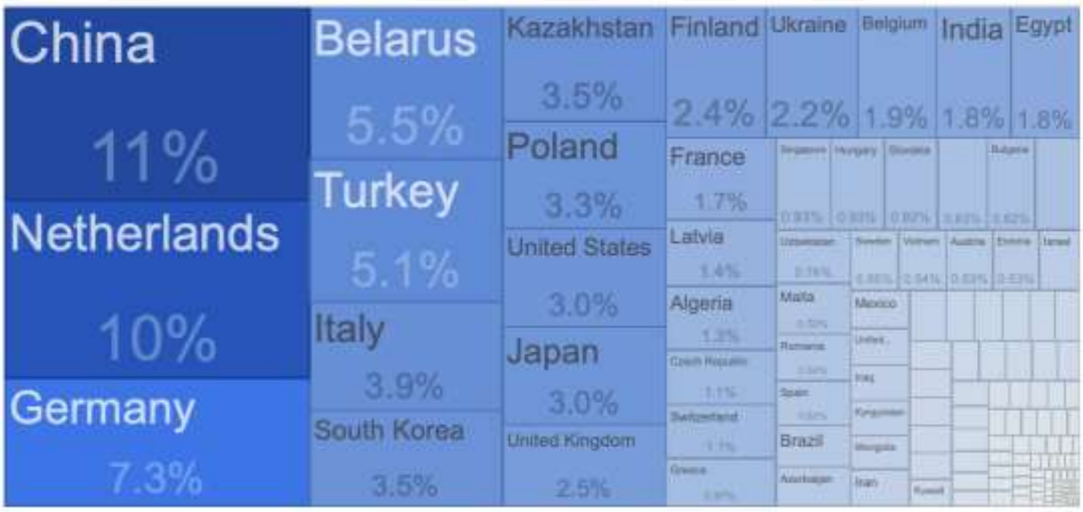

Figure 8: Russia's Export Partners (2017)

Source: United Nations Comtrade Database.

For example, in terms of energy export, Turkey is Gazprom's second biggest customer with taking about 30 bcm of natural gas[139] and Russia's annual energy revenue from Turkey is about 15 billion dollar, which is greater than its annual arms

[139] "DeliveryStatistics",*Gazprom*,at http://www.gazpromexport.ru/en/statistics
Köstem, S. (2018). The Political Economy of Turkish-Russian Relations: Dynamics of Asymmetric Interdependence. *Perceptions: Journal of International Affairs*, *23*(2).

sales[140]. Moreover, Russia exports approximately 150 million tons per year oil and petroleum to global market through the Turkish Straits, which is approximately 60 % of Russian total oil and petroleum export. [141] In times of military conflict, Turkey has a right to keep the Straits closed for Russian ships, which would impede Russian military strategy considerably. Further, we can be said that Russia's cost to end the strategic partnership strictly in trade is lower than these of Turkey's. However, when Russia challenges Turkey, depending on the value of demand, the cost of political conflict for Russia as challenger (i.e the political dispute on the Turkish Straits) may increase without necessarily increasing the military cost for Russia. In Table 5 (in Chapter 3 p. 51), I stated that "as the military cost of political conflict for challenger increases, exit cost threshold for challenger decreases." But, in the case of political conflict over the Turkish Straits, unless Russia directly employs military power, the value Russia attributes to the Turkish Straits importance for its oil and gas exports would decrease the exit cost threshold for Russia.

On the other hand, it is known that natural gas export requires a separate infrastructure for transport, so the asset specificity of the Blue Stream pipeline and available pipelines to redirect gas export to other markets is crucial for Russia. Figure 9 shows Russia's existing and planned natural gas export pipelines.

[140] Çelikpala, M. Ç.(2017)."Rusya gazı keser mi?" son gelişmeler ışığında Türkiye-Rusya enerji ilişkilerine bakmak. *Kuşku ile Komşuluk: Türkiye-Rusya İlişkilerinde Değişen Dinamikler (ss. 205–225). İstanbul: İletişim*.
[141] Köstem, S. (2018). The Political Economy of Turkish-Russian Relations: Dynamics of Asymmetric Interdependence.

Figure 9: Natural Gas Export Pipelines of Russia

Source: Gazprom

Russia's all existing natural gas pipelines are mainly from Western Siberia to Central Europe and Turkey. In terms of capacity, the Soyuz and Urengoy–Uzhgorod pipelines are the largest pipeline routes. The Nord Stream and the Yamal-Europe pipeline are also important for the EU market. Total capacity of these routes is approximately 200 bcm/year.[142] Due to the limited capacity of Blue Stream pipeline, some of gas export to Turkey is made through Western Line.[143] In addition to these pipelines, Russia has gas export projects such as Nord Stream II in the Baltic Sea, the Turkish Stream in the Black Sea, Altai pipeline to China, Power of Siberia.[144] While Power of Siberia project opens new markets for Russian natural gas, both the Turkish Stream and the Nord Stream II projects provides a larger direct transit of Russian natural gas to European market without Ukrainian transit pipelines.

[142] Simola, H., & Solanko, L. (2017). Overview of Russia's oil and gas sector, BOFIT Policy Brief, 5.
[143] Rzayeva, G. (2018). Gas Supply Changes in Turkey. Oxford Institute for Energy Studies.
[144] Gazprom. Available at http://www.gazprom.com/projects/

Table 11: Russian Gas Pipelines (Source: Gazprom)

Specification	Fields	Direction of Delivery	The Length of System	Year of Construction	Annual Capacity
Soyuz	The Reservoirs of Orenburg (Ural)	Western Europe	4.6 Thousand km	1975-1976	72 bcm
Urengoy–Pomary–Uzhhorod	Western Siberia Basin	Europe	4.5 Thousand km	1982-1984	32 bcm
Yamal	Western Siberia Basin	Western Europe	2.0 Thousand km	1997-2001	33 bcm
Blue Stream	The reservoirs of Caspian	Turkey	1.2 Thousand km	2000-2003	16 bcm
Nord Stream	Western Siberia Basin	Western Europe	1.1 Thousand km	2010-2012	55 bcm
Turkish Stream	Novy Urengoy in the Yamalo-Nenets autonomous region in Russia's Siberia	Turkey, Southern Europe	930 km	2017-2019	31.5 bcm
Nord Stream 2	Western Siberia Basin	Western Europe	1.2 Thousand km	2018-2019	55 bcm
Power of Siberia	Chayandinskoye and Kovyktinskoye field	Russia's Far East and China (eastern route).	3 Thousand km	2014-2019	38 bcm

The table 11 shows that the fields feeding the Turkish Stream and the Blue Stream pipelines are different than the fields feeding the Power of Siberia pipeline. The different fields feeding these gas pipelines highlight that Russia cannot directly transfer the natural gas volume of the Turkish Stream and the Blue Stream to the Power of Siberia pipeline in short-term if any disagreement between Turkey and Russia occurs (see Figure 10). However, the Power of Siberia' capacity (38 bcm/ year) gas increases Russian ability to compensate any revenue loss caused by the disagreement with Turkey.

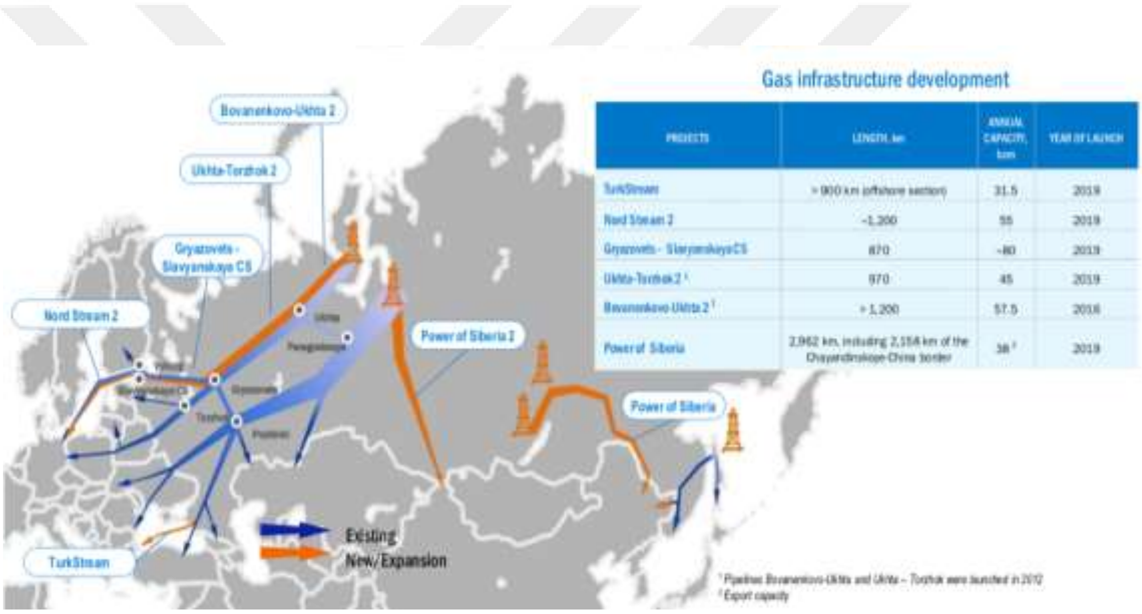

Figure 10: Gazprom Transportation Strategy

Source: Gazprom

Figure 11 also shows that Gazprom's share in European gas consumption was up to 35 % in 2017 and pipeline gas is the main resource meeting the growing demand for imported gas in Europe. With new projects (the Turkish Stream and the Nord Stream 2), Russia increases its ability to fill in any additional supply-demand gap in European market.

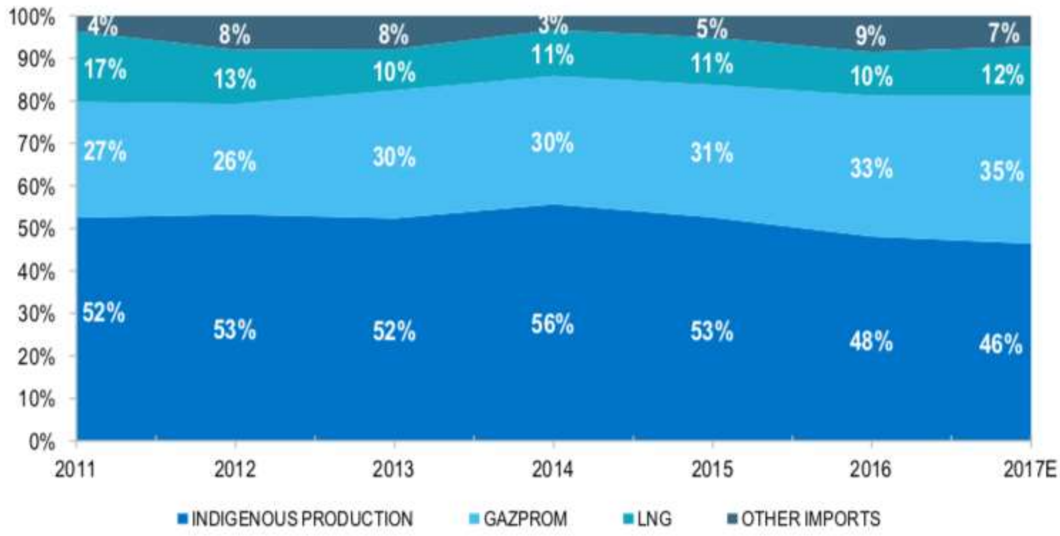

Figure 11: European Gas Balance

Source: Gazprom, Eurostat

Moreover, due to the political situation between Russian-Ukrainian, there is a weak possibility of signing a new agreement and continuing to use Ukrainian pipeline system seems. So, The Turkish Stream with the capacity of 31.5 bcm is essential for Russian gas export to European market.[145] Figure 12 shows that except routes through Finland and Ukraine, all Gazprom transport routes have at least 90 % utilization rate, which highlights that Russia needs both the Turkish Stream and the Nord Stream 2 to get Ukraine out of its way. With the Turkish Stream, the level of interdependence in sensitivity dimension between Turkey and Russia seems to increase. Russia becomes dependent on Turkey as a transit country for Gazprom's gas transportation to the Balkans, central and southeast Europe.[146] As a result, the value Russia attributes to the Turkish Stream (due to the limited natural gas transport infrastructure caused by political disagreements between Russia and Ukraine) would increase the cost of exit from strategic partnership.

[145] Pirani, S. (2019). Russia-Ukraine transit talks: the risks to gas in Europe. Oxford Institute for Energy Studies

[146] Rzayeva, G. (2018). Gas Supply Changes in Turkey. Oxford Institute for Energy Studies.

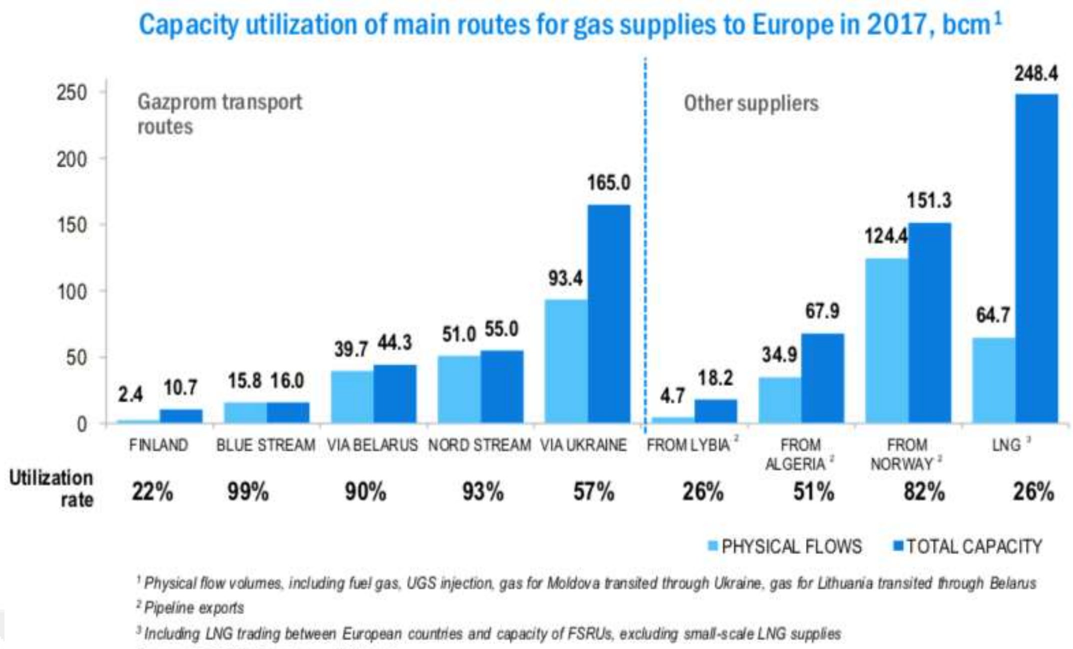

Figure 12: Gazprom Export Routes

Source: Gazprom, ENTSOG

Table 12 : Summary of Cases Based on Potential Demands of a Challenger

Case	Demand of Challenger	How Challenger Obtain	Pros for Challenger	Cons for Challenger
1-Turkey as challenger (Energy trade)	Better conditions for price, take or pay and destination clause in the new contract of Blue Stream pipeline.	Turkey is threating to exit from strategic partnership to obtain demand.	If Russia comply, - Lower price for natural gas import - Profit from re-export of gas. - Decrease the loss caused by take or pay clause.	If apply exit, - Loss in export revenue - Cost of finding substitutes for natural gas imported from Russia.
2-Russia as Challenger (Energy trade)	Better conditions for price, take or pay and the Turkish Straits in the new contract of Blue Stream pipeline	Russia is threating to exit from strategic partnership to obtain demand.	If Turkey comply, - Higher price for natural gas export - Eradicate the sale risk caused by seasonal demand. - Avert the loss caused by waiting at the traffic of straits.	If apply exit, - Loss in energy export revenue - Cost of finding new energy customers
3- Turkey as challenger (Regional security)	Hinder a Kurdish autonomy in Syria and removal of Assad Regime.	Turkey is threating to exit from strategic partnership to obtain demand and use military threats in Syria if Russia rejects the demand.	If Russia comply, - Solve refugee problem - Cover distance for the problem of PYD/PKK/YPG - Form a new strategic partner with a democratic regulation in Syria.	If apply exit, - Loss in trade revenue - Cost of finding substitutes for natural gas exported from Russia - Military cost of political conflict
4-Russia as Challenger (Regional security)	Accept the legitimacy of Assad Regime	Russia is threating to exit from strategic partnership to obtain demand and use military threats in Syria if Turkey rejects the demand	If Turkey comply, - Increase regional power influence	If apply exit, - Loss in energy export revenue - Cost of finding new energy customers - Military cost of political conflict

4.4 Solutions of Possible Games

Within the framework of energy trade and regional security in the strategic partnership between Turkey and Russia, there are four cases based on potential demands of a Challenger (see section 4.1 and 4.2) to test the limits of strategic partnership. In this section, I apply these demands to the game model to analyze the potential threshold of exit cost for each case.

4.4.1 Case 1: During the negotiation process for the new contract to import gas from the Blue Stream pipeline, Turkey demands better conditions for price, take or pay and destination clause.

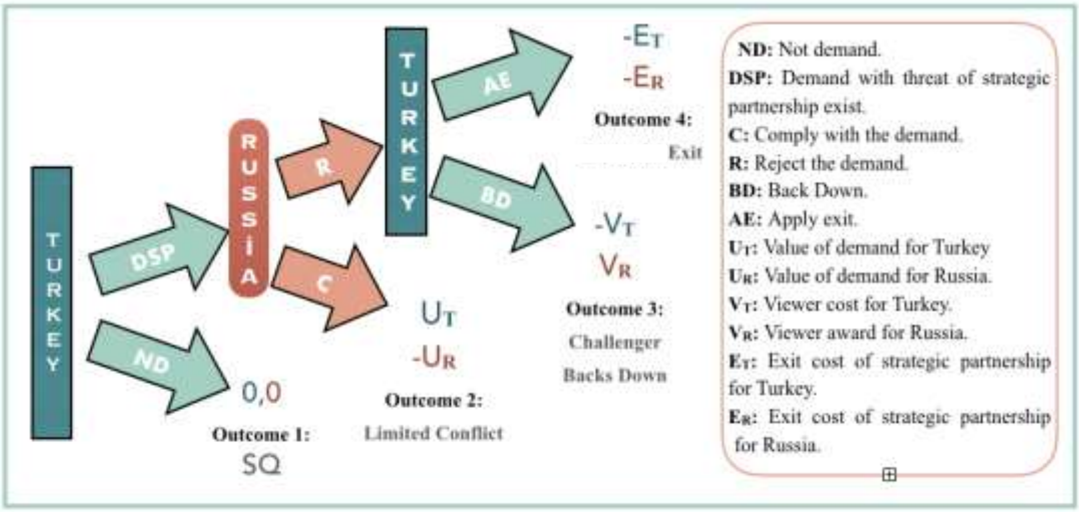

Figure 13: Extensive form Game for Case 1[147]

In the first case, Turkey makes the first move by demanding better conditions with a threat of existing from the strategic partnership exit. Russia makes the second move in the game by rejecting Turkey's demand or complying with it. If it complies, the

[147] Note: Payoffs listed as Turkey first and Russia second.

game ends; and if it rejects, the game continues with the third move of Turkey by applying exit or back down.[148]

4.4.1.1 The Actor's Preferences and Payoffs

The value of Turkey's demand (based on better conditions for price, take or pay and destination clause) is related economic advantages in energy sector. If Turkey can obtain these demands, not only the cost of energy import decreases, but also Turkey can get profit from reselling imported gas. Therefore, this demand has an effective value for the economy of Turkey, which makes the Outcome 2 (O_2) the most desirable for Turkey. On the other hand, I indicated in section 4.3 that due to the asset specificity of Blue Stream pipeline to import gas from Russia and limitation of accessible substitutes of products imported from Russia in short-term, the least desirable outcome for Turkey is Exit as Outcome 4 (O_4).

Secondly, the status-quo (SQ) means the continuation of current Blue Stream pipeline contract and preserving the current dimensions of the strategic partnership between Turkey and Russia. Therefore, for Turkey, continuation of the status-quo is clearly more preferable than the Outcome 3 (O_3) which Turkey faces viewer cost due to its failure in foreign policy.

Consequently, the preference ordering for Turkey over the outcome becomes;

$$\mathbf{O_2 > SQ > O_3 > O_4}$$

In order to avoid the complexities, I assign some numbers to utilities of each outcome for Turkey. The payoffs of the outcomes becomes like;

[148] Game tree for case1 ends with the Apply Exit rather than Apply Exit and Demand with threat of military force. Because Turkey's demand is minor economic demand and preferring using military force to obtain this demand seems not possible, especially under given military power distance between Turkey and Russia.

$$O_2 = 1, SQ = 0, O_3 = -1, O_4 = -2$$

For Russia, I indicated in section 4.3 that due to the asset specificity of Blue Stream pipeline to export gas to Turkey and importance of the Turkish Straits and the Turkish Stream project for the Russian gas and oil export to other markets, the least desirable outcome for Russia is also Exit as Outcome 4 (O_4). On the other hand, the most desirable outcome for Russia is the Outcome 3 (O_3) which Russia gains viewer award and preserves the value of demand. In addition, accepting Turkey's demand may result in some loss for Russia because the decrease in price of natural gas and change in destination clause would affect Russian revenues. Thus, the status-quo is clearly more preferable than the Outcome 2 (O_2) for Russia.

Consequently, the preference ordering for Russia over the outcome becomes;

$$O_3 > SQ > O_2 > O_4$$

In order to avoid the complexities, I assign some numbers to utilities of each outcome for Russia. The payoffs of the outcomes becomes like;

$$O_3 = 1, SQ = 0, O_2 = -1, O_4 = -2$$

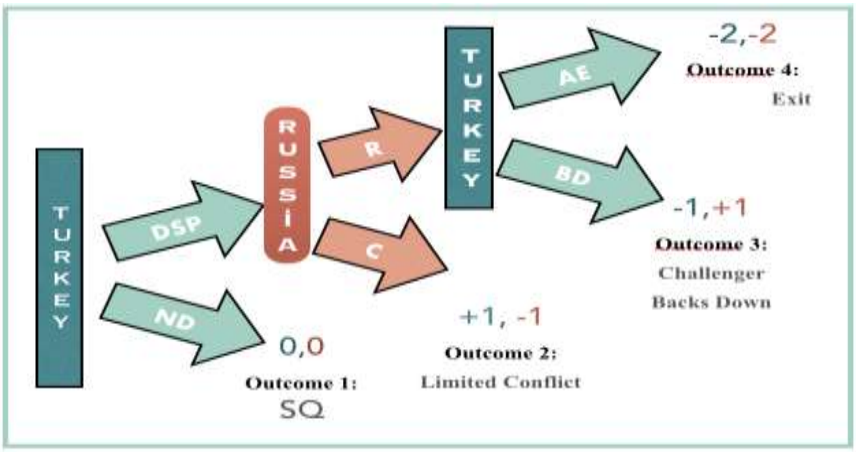

Figure 14: Extensive form Game for Case 1 with Payoffs[149]

[149] Note: Payoffs listed as Turkey first and Russia second.

In the game for case 1, by using backward induction method I analyze the sub-games from bottom to up. Firstly, in the sub-game at the bottom, it is clear that Turkey prefers to back down rather than apply exit (-1 < -2). Next, Russia makes a decision by already knowing the Turkey would back down, so Russia prefers rejecting the demand (+1> -1). This preferences impacts Turkey's choice at the top of decision tree and Turkey prefers not demand using threat of strategic partnership (0< -1). In this case, the equilibrium becomes; (Not Demand- Back Down; Reject) and both states get the payoff "0".

In summary, this game shows that when Turkey demands somethings not leading to influential change in the economies of both states, strategic partnership (particularly in energy trade) as a function of interdependence between Turkey and Russia is able to prevent conflict between them. Because the value of demand is not enough to make exit cost of strategic partnership tolerable for both sides.

4.4.2 Case 2: During the negotiation process for the new contract to import gas from the Blue Stream pipeline, Russia demands better conditions for price, take or pay and the Turkish Straits.

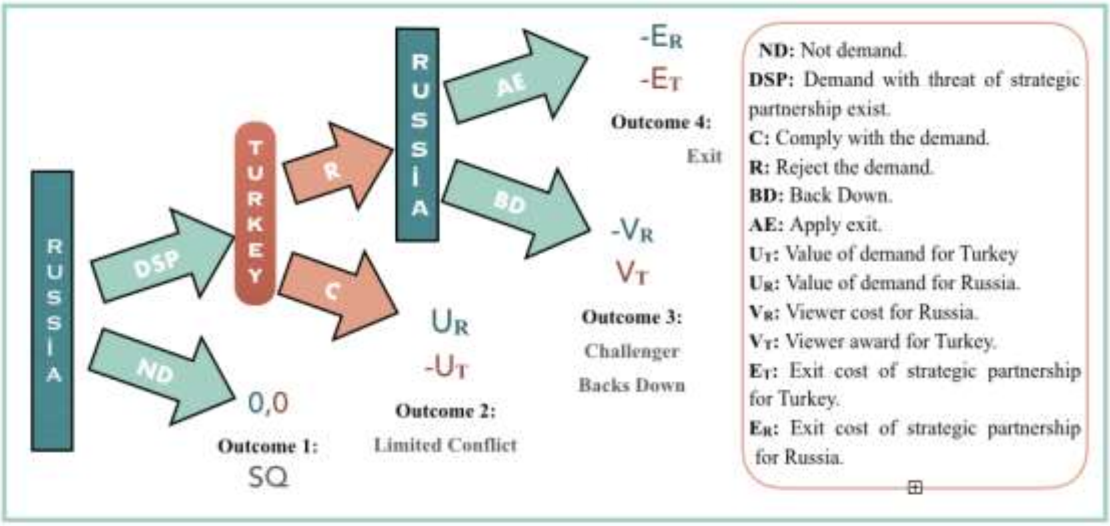

Figure 15: Extensive form Game for Case 2[150]

In the second case, Russia makes the first move by demanding better conditions for the contract with a threat of exiting from the strategic partnership. Turkey makes the second move in the game by rejecting Russian demand or complying with it. If it complies, the game ends; and if it rejects, the game continues with the third move of Russia by applying exit or back down[151].

4.4.2.1 The Actor's Preferences and Payoffs

The value of Russian demand (based on better conditions for price, take or pay and the Turkish Straits) is related to economic advantages in energy sector. If Russia can obtain these demands, not only Russia increases its revenue by selling natural gas with higher price and eradicating sales risks with take or pay clause but also prevents

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[150] Note: Payoffs listed as Russia first and Turkey second.
[151] Like case 1, game tree for case2 also ends with the Apply Exit rather than Apply Exit and Demand with threat of military force. Because Russian demand is minor economic demand and preferring using military force to obtain this demand seems not possible due to the risk of closing the Turkish Straits for Russian ships in a political conflict.

its loss caused by waiting at the traffic of straits. Therefore, this demand has considerable high value for the economy of Russia, which makes the Outcome 2 (O_2) the most desirable for Russia. On the other hand, I indicated in section 4.3 that the least desirable outcome for Russia is Exit as Outcome 4 (O_4) due to the asset specificity of Blue Stream pipeline to export gas to Turkey and importance of the Turkish Stream project for the Russian gas and oil export to other markets without Ukrainian transit. Secondly, the continuation of the status-quo is clearly more preferable than the Outcome 3 (O_3) which Russia faces viewer cost due to its failure in pursuing its demand in energy trade fully as part of its foreign policy.

Consequently, the preference ordering for Russia over the outcome becomes;

$$\mathbf{O_2 > SQ > O_3 > O_4}$$

In order to avoid the complexities, I assign some numbers to utilities of each outcome for Russia. The payoffs of the outcomes become as follows;

$$\mathbf{O_2 = 1, SQ = 0, O_3 = -1, O_4 = -2}$$

Both for Turkey and Russia the least desirable outcome is Exit as Outcome 4 (O_4) because of the asset specificity of Blue Stream pipeline to import gas from Russia and limitation of accessible substitutes of products imported from Russia in short-term. Secondly, the most desirable outcome for Turkey is the Outcome 3 (O_3) in which Turkey gains viewer award and preserves the value of demand. On the other hand, although enfranchising for the Turkish Straits not cause an extra cost for Turkey, accepting increase in price level and take or pay limits would undoubtedly influence Turkish economy negatively due to higher cost of energy import. Thus, the status-quo is clearly more preferable than the Outcome 2 (O_2) for Turkey.

Consequently, the preference ordering for Turkey over the outcome becomes;

$O_3 > SQ > O_2 > O_4$

In order to avoid the complexities, I assign some numbers to utilities of each outcome for Turkey. The payoffs of the outcomes become as follows;

$O_3 = 1, SQ = 0, O_2 = -1, O_4 = -2$

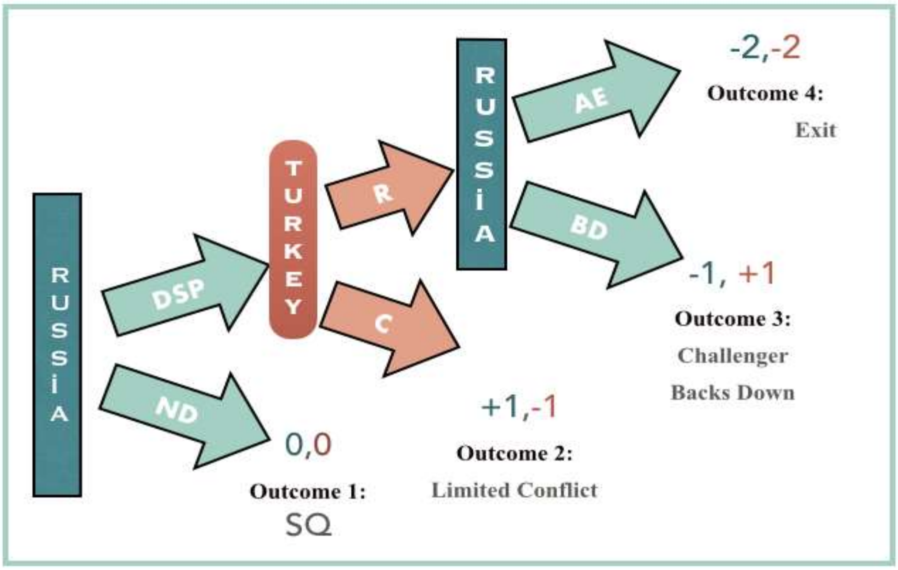

Figure 16: Extensive form Game for Case 2 with Payoffs[152]

In the game for case 2, I also use backward induction method. Firstly, in the sub-game at the bottom, it is clear that Russia prefers to back down rather than apply exit (-1 < -2). Next, Turkey makes a decision by already knowing the Russia would back down, so Turkey prefers rejecting the demand (+1> -1). These preferences impacts Russia's choice at the top of decision tree and Russia prefers not to demand by using threat of exiting from strategic partnership (0< -1). In this case, the equilibrium becomes; (Not Demand- Back Down; Reject) and both states get the payoff "0".

In summary, this game shows that when Russia demands somethings not leading to influential change in the economies of both states, strategic partnership (particularly

[152] Note: Payoffs listed as Russia first and Turkey second.

in energy trade) as a function of interdependence between Turkey and Russia is able to prevent conflict between them. Because the value of demand is not enough to make exit cost of strategic partnership tolerable for both sides.

4.4.3 Case 3: Turkey demands support from Russia to hinder a Kurdish autonomy in Syria and removal of Assad regime.

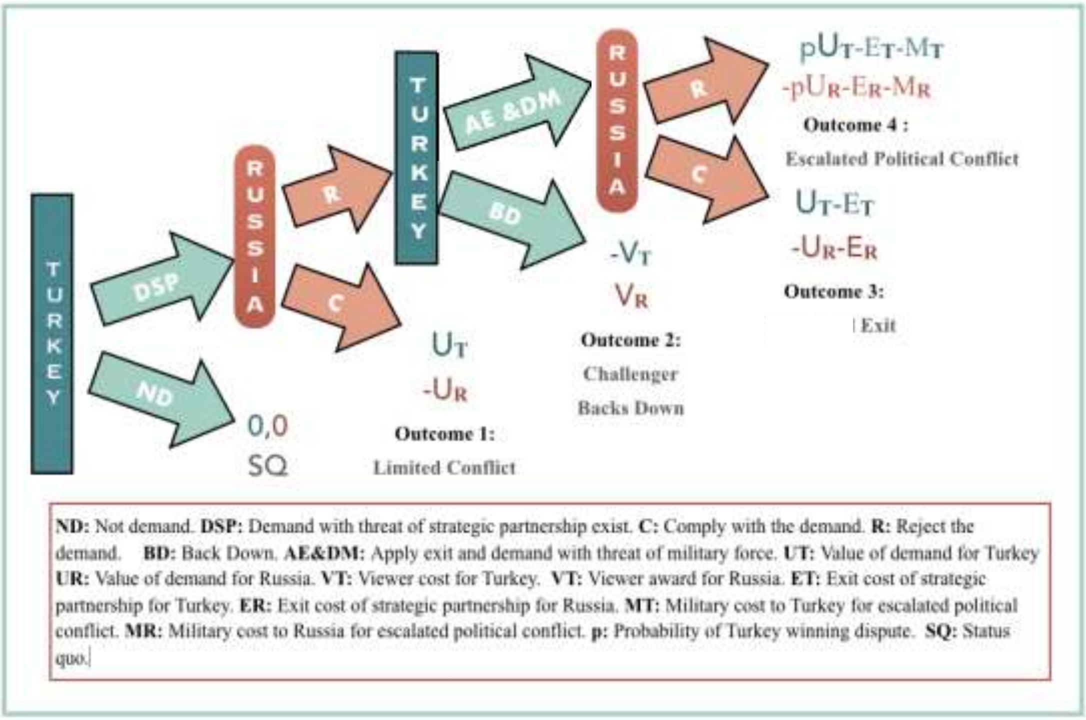

Figure 17: Extensive form Game for Case 3[153]

In the third case, Turkey makes the first move and demand support from Russia to hinder a Kurdish autonomy in Syria and removal of Assad regime with threatening to exit from the strategic partnership. Russia makes the second move in the game by rejecting Turkey's demand or complying with it. If Russia complies, the game ends. If Russia rejects, the game continues with the third move of Turkey by applying exit and demand with threat of military force or backs down. If Turkey withdraws its demand (Backs Down), the game ends. But if Turkey applies exit from strategic

153 Note: Payoffs listed as Turkey first and Russia second.

partnership, then Russia has to choose again whether to reject or accept Turkey's demand. If Russia accepts, the game ends. If the Russia rejects, the game results in an escalated political conflict, such as threat or use of military force (i.e. enforcing pro-Russian actors to leave some strategic zones in Syria).

4.4.3.1 The Actor's Preferences and Payoffs

The value of Turkey's demand based on Syria is related to the regional and national security. If Turkey fulfills this, then it gains not only an important distance for the PYD/YPG/PKK problem , but also solves the uncertain situation of the refugees in its territory and guarantees the future of the pro-Turkish opposition in Syria, which can potentially contribute to form a new strategic partner in the region. Therefore, the value of this demand is really high for Turkey, which is likely to constitute high thresholds for Turkey. Accordingly, the Outcome 1 (O_1) is the most desirable for Turkey. On the other hand, I indicated in section 4.3 that due to the asset specificity of Blue Stream pipeline to import gas from Russia and the limitations of accessible substitute gas imported from Russia in short-term, the exit cost of strategic partnership is high for Turkey. Further, probability of Turkey winning dispute seems close to zero because of the military power distance between Turkey and Russia. Thus, the least desirable outcome for Turkey is escalated political conflict as Outcome 4 (O_4).

Secondly, the status-quo (SQ) means the continuation of the current dimensions of Syrian conflict and the strategic partnership between Turkey and Russia. Therefore, for Turkey, continuation of the status-quo is clearly more preferable than the Outcome 2 (O_2) in which Turkey faces viewer cost due to its failure in its foreign policy.

Consequently, the preference ordering for Turkey over the outcome becomes;

$$\mathbf{O_1 > SQ > O_3 > O_2 > O_4}$$

The place of Outcome 3 (O_3) in preference order mentioned above is important to determine the solution of the game. Outcome 3 (O_3) means that Turkey increases its border security by satisfying its demands about regional security in Syria, but faces an exit cost including decrease in export revenues, loss related with Russian natural gas imports and cancellation of energy projects. Thus, given the significant influence of energy projects and natural gas in Turkey's electricity production and limitation of accessible substituted gas products in short-term, the status-quo (SQ) seems more preferable than Outcome 3 (O_3) for Turkey. However, if Turkey faces a situation endangering its national security, preserving the national security would become Turkey's first priority. In this scenario, the Outcome 3 becomes more preferable.

In order to avoid the complexities, I assign some numbers to utilities of each outcome for Turkey. The payoffs of the outcomes become as follows;

$$\mathbf{O_1 = 1,\ SQ = 0,\ O_3 = -1,\ O_2 = -2,\ O_4 = -3}$$

On the other hand, if Russia accepts Turkey's demand, Russia would also have some important loss. First of all, as I mention before, Syria is strategically important for Russia to preserve its power in the region. Secondly, since the beginning of the political movement known as the Arap Spring, Russia acts as a great partner of Assad regime, which is perceived negatively by anti-Assad groups in the Syria. Thirdly, in order to get a credit from the audience for its foreign policy in the Middle East, Syrian issue is an opportunity for Russia to compensate its relative failure in Libya during the US-led intervention. Lastly, YPG is a sub-state actor in the region for Russia to obtain its interest in the region. Therefore, accepting the Turkey's demand means that Russia would lose its power influence and credit in the region by breaking off its relations with the Assad regime and YPG. In this regard, the value of Turkey's demand seems also high for Russia and generates high thresholds for Russia. Accordingly, the least desirable outcome for Russia is Exit as the Outcome 3 (O_3) due to the combination of the value of demand and exit cost. The most desirable outcome for Russia is the Outcome 2 (O_2) in which Russia gains viewer award and preserves the value of demand, so the status-quo is more preferable than Outcome 1, 3 and 4. Moreover, if we take the priority of Russia as its economy rather than its influence in Middle East, the Outcome 1 (O_1) becomes more preferable than the Outcome 4 (O_4) because of the exit cost burden on Russian economy.

Consequently, the preference ordering for Russia over the outcome becomes;

$$\mathbf{O_2 > SQ > O_1 > O_4 > O_3}$$

By assigning some numbers to utilities of each outcome for Russia, the payoffs of the outcomes become as follows;

$$\mathbf{O_2 = 1,\ SQ = 0,\ O_1 = -1,\ O_4 = -2,\ O_3 = -3}$$

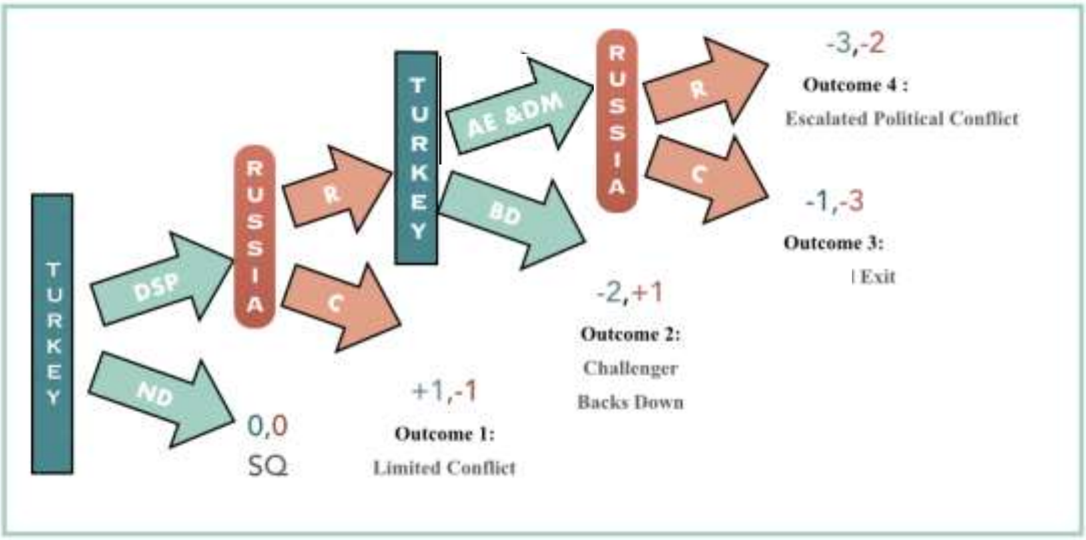

Figure 18: Extensive form Game for Case 3 with Payoffs[154]

[154] Note: Payoffs listed as Turkey first and Russia second.

In the game for case 3, I also use backward induction method. Firstly, in the sub-game at the bottom, it is clear that Russia prefers to reject rather than comply (-2< -3). Next, Turkey makes a decision by already knowing Russia would reject, so Turkey prefers back down (-2< -3). Next, Russia makes a decision by already knowing Turkey would back down and prefers reject (1> -1). This preferences impacts Turkey's choice at the top of decision tree and Turkey prefers not demand using threat of strategic partnership (0 > -2). In this case, the equilibrium becomes; (Not Demand- Back Down; Reject-Reject) and both states get the payoff "0".

In summary, this game shows that when Turkey makes a request related the Syrian conflict and its foreign policy priority is based on economy, the strategic partnership (particularly in regional security) as a function of interdependence between Turkey and Russia is able to prevent high-level conflict because of the high exit cost of strategic partnership for both side.

4.4.4 Case 4: Russia demands from Turkey to accept the legitimacy of Assad regime.

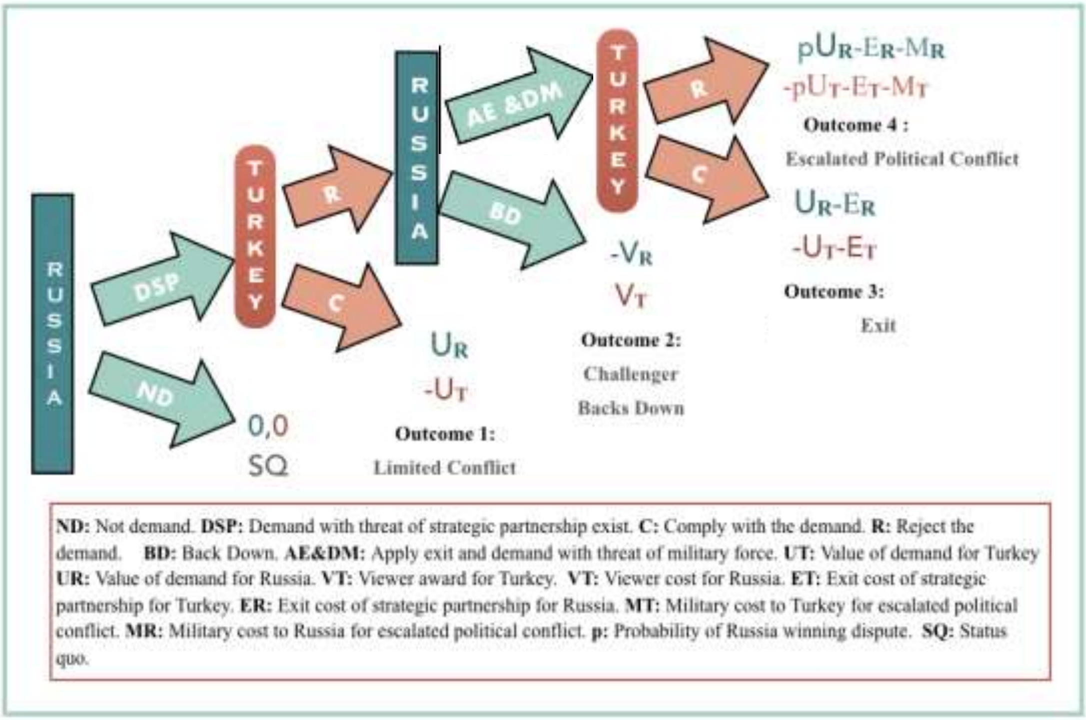

Figure 19: Extensive form Game for Case 4[155]

In the last case, Russia makes the first move and demands from Turkey to accept the legitimacy of Assad regime by threatening to exit from the strategic partnership. Turkey makes the second move in the game by rejecting Russian demand or complying with it. If Turkey complies, the game ends. If Turkey rejects, the game continues with the third move of Russia by applying exit and demand with threat of military force or back down. If Russia withdraws its demand (Back Down), the game ends. But if Russia applies exit from strategic partnership, the Turkey has to choose again whether to reject or accept Russian demand. If Turkey accepts, the game ends. If Turkey rejects, the game results in an escalated political conflict such as threat or

[155] Note: Payoffs listed as Russia first and Turkey second.

use of military force (i.e. closing Syrian air space to Turkish jetfighters or enforcing Turkish troops to leave some strategic zones in Syria).

4.4.4.1 The Actor's Preferences and Payoffs

First of all, for both states this demand is mainly related with their power influence in the region. While satisfying this demand gives Russia more opportunity to act together with the Assad regime and Turkey in the region, Turkey's compliance to Russian demand decrease Turkey's for pro-Turkish opposition groups. Further change in Turkish foreign policy for Assad regime would result in prestige loss in the domestic politics (the audience cost). Accordingly, the best outcome for Russia is the Outcome1 (O_1) and the most desirable preference for Turkey is the Outcome 2 (O_2). Secondly, other outcomes include higher exit cost and losing value of demand for Turkey, which indicates that the status-quo is more desirable outcome than others. Thirdly, because of the higher military capacity of Russia, the probability of Russia winning dispute by use of force or threat of force in Syria is close to 1, which makes the Outcome 4 (O_4) the least desirable for Turkey.

Consequently, the preference ordering for Turkey over the outcome becomes;

$$\mathbf{O_2 > SQ > O_1 > O_3 > O_4}$$

By assigning some numbers to utilities of each outcome for Turkey, the payoffs of the outcomes becomes like;

$$\mathbf{O_2 = 1,\ SQ = 0,\ O_1 = -1,\ O_3 = -2,\ O_4 = -3}$$

The value of Russian demand is crucial for the preference ordering. Because if the value Russia attributes to the legitimacy of Assad regime is lower than the exit cost of strategic partnership, the preference ordering for Russia over the four outcome becomes;

$$O_1 > SQ > O_3 > O_2 > O_4$$ [156]

By assigning some numbers to utilities of each outcome for Russia, the payoffs of the outcomes become as follows;

$$O_1 = 1,\ SQ = 0,\ O_3 = -1,\ O_2 = -2,\ O_4 = -3$$

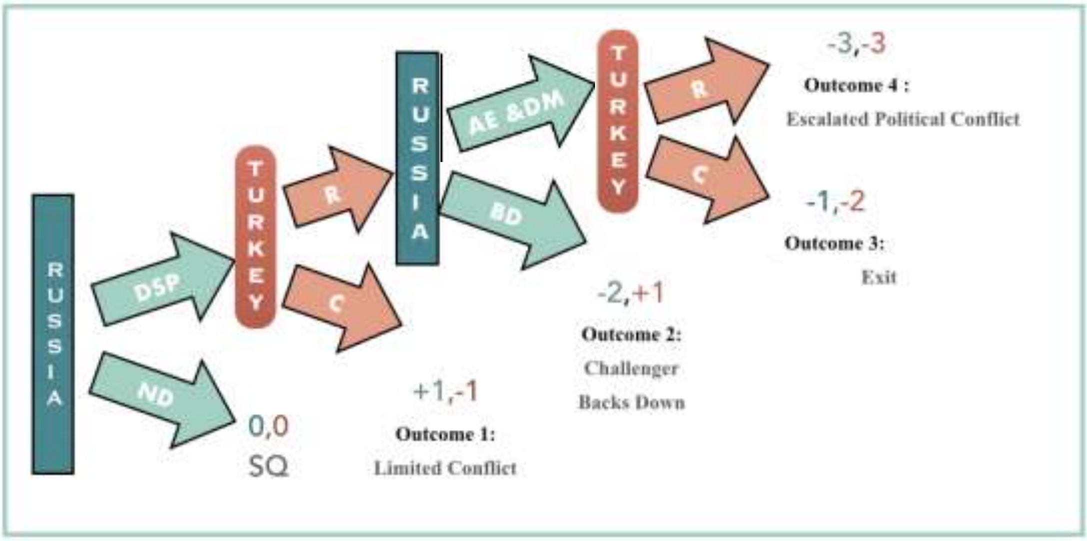

Figure 20: Extensive form Game for Case 4 with Payoffs[157]

By using backward induction method, in the sub-game at the bottom, it is clear that Turkey prefers to comply rather than reject (-2< -3). Next, Russia makes a decision by already knowing Turkey would comply, so Russia prefers apply exit and demand with threat of using force (-1< -2). Next, Turkey makes a decision by already knowing Russia would apply exit and demand with threat of using force, so prefers comply (-1> -2). This preferences impacts Russia's choice at the top of decision tree and Russia prefers demand by threatening to exit from of strategic partnership (0 < 1). In this case, the equilibrium becomes; (Demand (DM)- Apply Exit and Demand (AE&DM) ; Comply-Comply) and Russia gets the payoff "1", while Turkey gets the payoff "-1".

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[156] As an important regional actor, failure of Russian foreign policy would influence its credibility and cause a high viewer cost. So it is accepted that O_2 is worse than O_3 for Russia.
[157] Note: Payoffs listed as Russia first and Turkey second.

Even if the value Russia attributes to the legitimacy of Assad regime is higher than the exit cost of strategic partnership, the game provides the same equilibrium because the Outcome 2 (O_2) becomes least desirable outcome for Russia and Russia prefers AE&DM, which indicates the decision of Turkey as comply.

In summary, this game shows that when Russia makes a request related the Syrian conflict, the strategic partnership as a function of interdependence between Turkey and Russia is able to prevent high-level conflict because of the high exit cost of strategic partnership for Turkey. In addition, the game shows the influence of indicators mentioned in Table 5 (in Chapter 3 p. 51) on the exit cost threshold. For example, due to the high probability of success for Russia in the event of escalated political conflict, while Russia is willing to tolerate high exit cost of strategic partnership to obtain demand, Turkey does not prefer to tolerate high exit cost of strategic partnership. Moreover, whether the value of demand for Russia is more than exit cost or not, the value Russia attributes to viewer cost play a crucial role to determine the equilibrium of the game. Because if Russia does not care about the viewer cost, the game may end at Status-quo like case 3.

4.5 Conclusion for Chapter 4

In chapter 3, I propose two hypotheses to test the sustainability of the strategic partnership between Turkey and Russia.

Hypothesis 1: When the target's exit cost from the strategic partnership between Turkey and Russia is high, then a low level of conflict will be expected.

Hypothesis 2: When the exit cost from the strategic partnership between Turkey and Russia is high for both the target and the challenger, then the possibility of higher-conflict will be less.

The solution of game tree for case 1 and case 2 rejects the first hypothesis because although target's exit cost from strategic partnership is high, both games end with status-quo rather than a low level conflict due to the high cost of challenger. In other words, only target's high exit cost is not enough to predict the conflict between actors. On the other hand, case 3 and case 4 confirm the second hypothesis because in both cases, due to the high exit cost from strategic partnership for both sides, high level conflict cannot be observed in both games.

The findings, thus, overall suggests that energy trade particularly in the strategic partnership (case 1& 2) would sustain the existing interdependence between Turkey and Russia. Given my focus on sensitivity and resource dimensions of interdependence between two countries, we can conclude that asymmetric interdependence in energy trade between two countries would not change. When we consider the regional security in strategic partnership (case 3&4), no higher conflict would be expected between two countries which in turn would further highlight the sustainability of the asymmetric interdependence between Turkey and Russia in the short and mid-term.

CHAPTER 5

CONCLUSION

This study analyzes the strategic partnership between Turkey and Russia as a function of the interdependence between them. I first presented the historical background of the bilateral relations since the World War I to review which theoretical arguments and related factors were considered in the relevant literature. My aim to review the literature for the historical background of the bilateral relations was to understand how the recent rapprochement between two countries has been pawed. Thus, major observation in Chapter 2 is that the bilateral relations have been not stable since WW I, including the Soviet Union era (especially after WWII) and later the Russian Federation era (especially during 2008-2016). Even though both countries had no motivation or interest to challenge each other directly, except for the Stalin period, external factors (such as change in the world order and balance of power in the region) have led to some crisis between Turkey and Soviet Union /Russia. Nevertheless, two countries' bilateral relations have developed since the early 2000s and the relationship between them started to be called strategic partnership. Thus, after describing the main characteristics of their bilateral relations in the historical context, in chapter 2, I also reviewed the concept of 'strategic partnership' and its use in the literature.

In light of the contested and to an extent conceptually not precise definitions of strategic partnership in the literature, I demonstrated major features of the strategic partnership to examine the Turkish- Russian case given the historical context of their bilateral relations. According to my reading of literature on strategic partnership revealed that the extent of common interests in Turkish-Russian foreign policy priorities are important to establish strategic partnership and preserve its longevity in their bilateral relations. Thus, I identified three main issues namely, trade, energy trade and regional security as common interests in their foreign policy priorities that have been paving the way for strategic partnership between Turkey and Russia.

As a second step of my thesis, to test the sustainability of the strategic partnership, I constructed a game model for strategic partnership. By using the backward induction, I solved the general form of the strategic partnership game and the solution provided three main equilibria: (i) prohibitor equilibria, (ii) bargaining power equilibria and (iii) crisis equilibria.

These tree equilibria helped me to examine whether interdependence between two countries would reduce or sustain interdependence. Although interdependence is a well-known concept in international relations literature, increasing use of the "strategic partnership" in bilateral relations between Turkey and Russia requires some systematic analysis to assess whether the concept of the strategic partnership as a function of interdependence can be studied. Within this framework, my solution for the game model provided a rational explanation that can be tested. For example; while prohibitor equilibria verifies the argument that interdependence decreases conflict, bargaining power equilibria is not exactly compatible with the argument that interdependence decrease conflict. The crisis equilibria also shows that interdependence is not always enough to retrain conflict.

According to these three equilibria, I proposed two hypothesis for the strategic partnership between Turkey and Russia. To see how the interdependence between

Turkey and Russia can function to sustain or suspend the strategic partnership, I evaluated the possible demands by two states to act as a challenger. I defined potential demands by two states in light of my previous examination of the historical context and recent developments in the bilateral relations of Turkey and Russia based on the four dimensions of complex interdependence (Welch and Nye, 2014). Thus, I constructed four cases given that energy trade and regional security are important issues for particularly the resources and sensitivity dimensions of interdependence. I solved the strategic partnership game for each case by using backward induction.

The findings of game solutions show that both states have high exit cost of strategic partnership due to the dynamics of interdependence between them. When Turkey or Russia demand related to energy or regional security issues, which have no significant impact on economies of both states, strategic partnership as a function of interdependence between Turkey and Russia is able to prevent conflict. However, it is important to note that in my cases, even demand(s) have high value together with the exit cost from the asymmetric interdependence between Turkey and Russia, the imbalance in military power between two countries prevents a high level conflict.

This study, overall, suggests that asymmetric interdependence between two countries would not change based on the sensitivity and resource dimensions of interdependence between Turkey and Russia. This thesis concludes that energy trade part of the strategic partnership would sustain the existing asymmetric interdependence between Turkey and Russia. Further, the regional security part of the strategic partnership would be expected to continue with no high level conflict between Turkey and Russia, which highlights the asymmetric interdependence between two countries in short and mid-term. Consequently, according to the findings of game solutions, we can be said that bilateral relations between Turkey and Russia would reach a stable level and preserve this stability unlike their history. However, although interpretations of game solutions in this study indicate these outcomes, it should not be forgotten that game models does not exactly reflect reality. Thus, based on other factors not included in my game model such as domestic politics, these outcomes can be changed in reality.

In my game theoretical analysis, I focused on sensitivity and resource dimensions of the interdependence in short-term. In light of the historical context and recent developments in bilateral relations of Turkey and Russia, I identified energy trade and regional security as important issues in the sensitivity and resource dimensions of the interdependence in short-term. However, vulnerability dimension of interdependence, which underlines change in structure of the bilateral relations in long term, and the third parties influence on both parties require a more sophisticated multi-level game model for future research. Moreover, my hypotheses are limited with the assumption that both challenger and target would act rationally driven strictly by cost- benefit analysis. Thus, perceptions and preferences of leaders in bringing demands, which might be shaped by ideational forces especially after critical junctures in global political economy or exogenous shocks in world politics, are omitted.

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