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RECENTLY TURKEY-RUSSIAN FEDERATION ECONOMIC RELATIONS (OPPORTUNITIES AND ISSUES)

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ABSTRACT

It is a known fact that while Turkey and Russian are bordering neighbors, there are large differences between the two countries in terms of geographical integrity and total production. However, the nations share the same geography since ancient ages, hence there are a lot of cultural similarities between them. The relationship between Turkey and Russia spans commerce, energy and tourism and other fields with potential to develop. Development of commercial activities between Turkey and Russia, two prominent centers of power in the region, also carries the potential to reduce these countries' dependencies to western countries in these areas. The cooperation between Turkey and Russia in the energy field will increase reliability of Turkey in terms of energy procurement, therefore increasing the country's strategic importance. A cooperation between the two countries in terms of security will only provide stability to both countries, but also to every area on which these countries have dominance. Cooperation in many other sectors, specifically in tourism and education, will create even stronger bonds between the nations of the two countries which share many cultural elements. It should also be stressed that it is quite in favor of certain other centers of political power when the Turkish-Russian relationships are less than ideal. Any deterioration in the two countries' economical and commercial relations directly mean losses amounting to millions of USD for both economies.

Keywords: Turkey, Russia, Economic relations, economy, trade, export, import, energy, opportunities, issues **JEL Clasifications:** F50 F51, F53

1. INTRODUCTION

It is a known fact that while Turkey and Russian are bordering neighbors, there are large differences between the two countries in terms of geographical integrity and total production. However, the nations share the same geography since ancient ages, hence there are a lot of cultural similarities between them.

Commercial relations between Turkey and Russia date back a very long time. Since the declaration of the Republic order, oil, sugar and woven products have been the topmost imports of Turkey from Russia. In 1923, Turkey's imports from Russia consisted 2% of the country's total imports. In 1924 this went up to 3.29%. Turkey was exporting tobacco, mines and small and normal cattle to Russia, and in return imported oil, food and lighting products. As a results of negotiations between the Turkish Foreign Minister Tevfik Rüştü and the Soviet Foreign Minister Georgy Chicherin, a "Trade and Navigation Agreement" was signed between the two countries on 11 March 1927. The relationships between Turkey and Soviet Russia was generally positive and productive until WWII. During WWI the Soviet Russia was on the opposing side to the Ottoman Empire but then due to the revolution in the country, withdrew from the war and then started their support for the Turkish National Battles against the imperialist block.

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Turkey's leading industry sectors in terms of economy, such as petrochemistry, iron-steel and aluminum could be established thanks to considerable support from the USSR.

The agreement signed between USSR, the country with the richest natural gas reserves in the world, and Turkey, on 18 September 1984 for natural gas transfer is crucially important for Turkey. As per the agreement, the "Russia Federation - Turkey Natural Gas Line" started to be constructed on 26 October 1986. The line had advanced to Ankara by August, 1988. In order to enable industrial companies to utilize natural gas, the "Russia Federation - Turkey Natural Gas Line" was elaborated with capillary distribution lines to industrial zones on its route, while new lines were also installed as per requests from the industry. In addition, as per the natural gas agreement signed in 1984 for a period of 25 years, Turkey was to buy 6 billion cubic meters of natural gas annually from Russia. Another agreement signed on 10 December 1996 added 8 billion cubic meters annually to this, and did not include any provisions for offsetting. Turkey started buying the additional natural gas by March, 1998. The program with the Blue Marmara project involved the flowing of 16 billion cubic meters of natural gas annually from Russia to Turkey.

After the USSR dissolved, commercial interaction between the two countries continued to grow fast. In 2000 the Russian Federation was the 9th most country where Turkey did their exports, and during 2003 and 2004 they went up to the 8th. In 2005 they were back at the 9th. In terms of imports, the Russian Federation was the 4th most country where Turkey did their imports from. They went up to the 2nd in 2004 and 2005. When the USSR dissolved the commercial relationships between Turkey and the Russians accelerated, but after a certain time of fluctuations, they found new stable ground. The global economic crisis in 2008 also had its effects on the Turkish-Russian commercial relationships, albeit for a short time.

The Russian Federation and Turkey are two dominant countries in the Middle East and the Black Sea basin, but at the same time geopolitical competitors. This competition has been going on for many centuries, but Turkey's position has been on a steady regression during the Empire and USSR eras. In the time of cold war, the relationships between the Soviet Union and Turkey showed almost no improvement within the borders of the global political atmosphere. When the Cold War ended, these relationships, then between the successive Russian State and Turkey, kicked off to a fast progress. Moscow and Ankara discovered the potential in commerce, tourism and energy, which was then followed by taking actions that resulted in interactions benefiting both sides.

The relationship between Turkey and Russia spans commerce, energy and tourism and other fields with potential to develop. Development of commercial activities between Turkey and Russia, two prominent centers of power in the region, also carries the potential to reduce these countries' dependencies to western countries in these areas. The cooperation between Turkey and Russia in the energy field will increase reliability of Turkey in terms of energy procurement, therefore increasing the country's strategic importance. A cooperation between the two countries in terms of security will only provide stability to both countries, but also to every area on which these countries have dominance. Cooperation in many other sectors, specifically in tourism and education, will create even stronger bonds between the nations of the two countries which share many cultural elements.



It should also be stressed that it is quite in favor of certain other centers of political power when the Turkish-Russian relationships are less than ideal. Any deterioration in the two countries' economical and commercial relations directly mean losses amounting to millions of USD for both economies.

2. COMPARING TURKEY AND RUSSIA

Table 1: Comparing Turkey and Russia in terms of Certain Demographic Criteria

Turkey

Region	Western Asia	UN membership date	24 October 1945
Population (000, 2018)	81 917 ^a	Surface area (km2)	783 562 ^b
Pop. density (per km2, 2018)	106.4ª	Sex ratio (m per 100 f)	97.2 ^a
Capital city	Ankara	National currency	Turkish Lira (TRY)
Capital city pop. (000, 2018)	4 919.1 ^c	Exchange rate (per US\$)	3.8 ^d

Russian Federation

Region	Eastern Europe	UN membership date	24 October 1945
Population (000, 2018)	143 965 ^a	Surface area (km2)	17 098 246 ^b
Pop. density (per km2, 2018)	8.8 ^a	Sex ratio (m per 100 f)	86.8 ^a
Capital city	Moscow	National currency	Russian Ruble (RUB)
Capital city pop. (000, 2018)	12 409.7	Exchange rate (per US\$)	57.6°

Population of the Russian Federation is almost 1.5 times that of Turkey and this population is predominantly made up of female citizens. There are 86.8 male citizens for every 100 female citizens. Population density for the Russian Federation is 8.8 people per square kilometer, which can be explained with geographical size. In comparison, Turkey's population density is 106.4 people per square kilometer.

Table 2: Comparing Turkey and Russian Federation in terms of Economical Indicators

Turkey

Economic indicators	2005	2010	2018
GDP: Gross domestic product (million current US\$)	501 423	771 877	863 712 ^e
GDP growth rate (annual %, const. 2010 prices)	9.0	8.5	3.2 ^e
GDP per capita (current US\$)	7 384.0	10 672.0	10 863.0 e
Economy: Agriculture (% of Gross Value Added) ^f	10.6	10.3	7.0 ^e
Economy: Industry (% of Gross Value Added) ^f	29.0	28.0	32.0 ^e
Economy: Services and other activity (% of GVA) ^f	60.4	61.8	61.0 ^e
Employment in agriculture (% of employed) ^g	25.7	23.7	18.8
Employment in industry (% of employed) ^g	26.3	26.2	26.9
Employment in services & other sectors (% employed) ^g	48.0	50.1	54.3
Unemployment rate (% of labour force)	10.6	10.7	11.1 ^g
Labour force participation rate (female/male pop. %) ^g	23.3 / 70.1	27.0 / 69.6	32.2 / 71.7
CPI: Consumer Price Index (2010=100) ^{g,i}	66 ^h	100	175 ^d
Agricultural production index (2004-2006=100)	101	110	129 ^e
Index of industrial production (2005=100)	100	116 j	140 j,k
International trade: exports (million current US\$)	73 476	113 883	157 055 ^d
International trade: imports (million current US\$)	116 774	185 544	233 792 ^d
International trade: balance (million current US\$)	- 43 298	- 71 661	- 76 737 ^d
Balance of payments, current account (million US\$)	- 20 980 ^h	- 44 616	- 47 378 ^d

Russian Federation

Economic indicators	2005	2010	2018
GDP: Gross domestic product (million current US\$)	764 016	1 524 917	1 246 015 ^d
GDP growth rate (annual %, const. 2010 prices)	6.4	4.5	- 0.2 ^d
GDP per capita (current US\$)	5 320.0	10 652.0	8 655.0 ^d
Economy: Agriculture (% of Gross Value Added)	5.0	3.9	4.7 ^d
Economy: Industry (% of Gross Value Added)	38.1	34.7	32.4 ^d
Economy: Services and other activity (% of GVA)	57.0	61.4	62.8 ^d
Employment in agriculture (% of employed)	10.2 e	7.8	6.6 ^e
Employment in industry (% of employed) ^e	29.8	27.7	26.8
Employment in services & other sectors (% employed) ^e	60.0	64.5	66.6
Unemployment rate (% of labour force)	7.2	7.4	5.0 ^e
Labour force participation rate (female/male pop. %) ^e	55.9 / 68.3	56.5 / 70.8	56.3 / 71.4
CPI: Consumer Price Index (2010=100)	61	100	168 ^c
Agricultural production index (2004-2006=100)	99	99	139 ^d
Index of industrial production (2005=100) ^f	100	109	121 g
International trade: exports (million current US\$)	241 452	397 068	403 406 ^{e,c}
International trade: imports (million current US\$)	98 707	228 912	228 213 °
International trade: balance (million current US\$)	142 744	168 156	175 194 ^{e,c}
Balance of payments, current account (million US\$)	84 389	67 452	35 173 °

Looking at economical indicators, Turkey is indeed on a positive track, albeit with a slowing down pace, however the Russian Federation is in a regression. As of the year 2018, 61% of the Turkish economy is generated by the service sector, 32% by the industry sector and 7% by agriculture, while 62.8% of the Russian economy is generated by the service sector, 32.4% by the industry sector and 4.7% by agriculture. In terms of manpower distribution, 54.3% of the working class in Turkey is positioned in the service sector, 26.9% in industry sector and 18.8% in agriculture. In Russia, these ratios are 66.6%, 26.8% and 6.6% respectively. Unemployment rates by 2018 were 11.1% in Turkey and 5% in Russia. Inflation rates are roughly the same. By reference to 2010 prices, Turkey had a 75% price increase and the Russian Federation, %68 in the eight-year period between 2010-2018.





Looking at yearly figures, GDP figures were the same in 1998 and 2000, while GDP in the Russian Federation increased thereafter but in a rather fragile fashion, expectedly taking sharp falls in 2009 and 2016 due to oil prices and international crises. Turkey reacted comparatively more smoothly to these international crises, which helped preserve the country's stable growth in these times.



Income per capita yields a parallel course in the progressing of figures. In 2010 this ratio surpassed that of Turkey, but after 2014 it started regressing, after which it was equal again in 2017. In terms of foreign trade, Russian Federation's activities are more focused on exports, while Turkey's on imports. Both countries doubled their imports between 2005-2018.

Table 3: Major trading partners

Turkey

Major trading partners						2017
Export partners (% of exports)	Germany	9.6	United Kingdom	6.1g	United Arab Emirates	5.8
Import partners (% of imports)	China	10.0	Germany	9.1	Russian Federation	8.3
Russian Federation						
Major trading partners						2017
Export partners (% of exports)	Areas nes ^h	11.0 ^e	China	9.7 e	Netherlands	8.8
Import partners (% of imports)	China	21.2	Germany	10.0	United States	5.6

Turkey's prominent commercial partners in exports are Germany with 9.6% share, the UK with 6.1%, UAE with 5.8%, Russia with 11%, old eastern bloc countries and China with 9.7% and Holland with 8.8%. Both Turkey and Russia do their topmost exports to China and this ratio constitutes 10% of Turkey's total exports and 21.2% of Russia's. For both countries Germany follows China with 9.1% and 10% respectively. While 8.3% of Turkey's exports is realized through the Russian Federation, 5.6% of the Russian Federation exports is realized through the USA.

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Table 4: Comparing Turkey and Russian Federation in terms of Social Indicators

Turkey

Social indicators	2005	2010	2018
Population growth rate (average annual %) ¹	1.4	1.3	1.6 ^b
Urban population (% of total population)	67.8	70.8	75.1
Urban population growth rate (average annual %) ¹	2.4	2.1	2.4 ^b
Fertility rate, total (live births per woman) ¹	2.4	2.2	2.1 ^b
Life expectancy at birth (females/males, years) ¹	74.9 / 68.0	76.9 / 69.9	78.1 / 71.5 ^b
Population age distribution (0-14/60+ years old, %)	28.6 / 9.6	26.9 / 10.4	24.6 / 12.3 a
International migrant stock (000/% of total pop.) ^m	1 319.2 / 1.9	1 367.0 / 1.9	4 882.0 / 6.0 ^d
Refugees and others of concern to the UNHCR (000)	8.7 ⁿ	17.8 ⁿ	3 470.1 ^d
Infant mortality rate (per 1 000 live births) ¹	24.7	16.4	12.6 ^b
Health: Current expenditure (% of GDP)	4.9	5.1	4.1 ^b
Health: Physicians (per 1 000 pop.)	1.5	1.7	1.7 ^k
Education: Government expenditure (% of GDP)	3.00	2.8 ^p	4.4 ^k
Education: Primary gross enrol. ratio (f/m per 100 pop.)	100.5 / 105.8	100.6 / 102.0	102.9 / 103.6 ^b
Education: Secondary gross enrol. ratio (f/m per 100 pop.)	76.1 / 91.6	80.5 / 87.9	101.7 / 104.4 ^b
Education: Tertiary gross enrol. ratio (f/m per 100 pop.)	27.9 / 38.2	50.5 / 62.1	88.9 / 101.8 ^b
Intentional homicide rate (per 100 000 pop.)	4.9	4.2	4.3 q
Seats held by women in the National Parliament (%)	4.4	9.1	14.6
Russian Federation			
Social indicators	2005	2010	2018
Social indicators	2005	2010 - 0.1	2018
Social indicators Population growth rate (average annual %) ⁱ			
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population)	- 0.4	- 0.1	0.1 ^b
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ	- 0.4 73.5	- 0.1 73.7	0.1 ^b 74.4
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ	- 0.4 73.5 - 0.4 1.3	- 0.1 73.7 -~0.0	0.1 ^b 74.4 0.2 ^b
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ	- 0.4 73.5 - 0.4	- 0.1 73.7 -~0.0 1.4	0.1 ^b 74.4 0.2 ^b 1.7 ^b
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ Life expectancy at birth (females/males, years) ⁱ	- 0.4 73.5 - 0.4 1.3 72.0 / 58.6	- 0.1 73.7 -~0.0 1.4 73.7 / 61.0 14.9 / 18.0	0.1 ^b 74.4 0.2 ^b 1.7 ^b 75.9 / 64.7 ^b
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ Life expectancy at birth (females/males, years) ⁱ Population age distribution (0-14/60+ years old, %)	- 0.4 73.5 - 0.4 1.3 72.0 / 58.6 15.2 / 17.2	- 0.1 73.7 -~0.0 1.4 73.7 / 61.0	0.1 ^b 74.4 0.2 ^b 1.7 ^b 75.9 / 64.7 ^b 17.8 / 21.5 ^a
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ Life expectancy at birth (females/males, years) ⁱ Population age distribution (0-14/60+ years old, %) International migrant stock (000/% of total pop.)	- 0.4 73.5 - 0.4 1.3 72.0 / 58.6 15.2 / 17.2 11 667.6 / 8.1	- 0.1 73.7 -~0.0 1.4 73.7 / 61.0 14.9 / 18.0 11 194.7 / 7.8	0.1 ^b 74.4 0.2 ^b 1.7 ^b 75.9 / 64.7 ^b 17.8 / 21.5 ^a 11 651.5 / 8.1 ^c
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ Life expectancy at birth (females/males, years) ⁱ Population age distribution (0-14/60+ years old, %) International migrant stock (000/% of total pop.) Refugees and others of concern to the UNHCR (000)	- 0.4 73.5 - 0.4 1.3 72.0 / 58.6 15.2 / 17.2 11 667.6 / 8.1 483.1 j	- 0.1 73.7 -~0.0 1.4 73.7 / 61.0 14.9 / 18.0 11 194.7 / 7.8 132.6j	0.1 ^b 74.4 0.2 ^b 1.7 ^b 75.9 / 64.7 ^b 17.8 / 21.5 ^a 11 651.5 / 8.1 ^c 282.6 ^c
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ Life expectancy at birth (females/males, years) ⁱ Population age distribution (0-14/60+ years old, %) International migrant stock (000/% of total pop.) Refugees and others of concern to the UNHCR (000) Infant mortality rate (per 1 000 live births) ⁱ Health: Current expenditure (% of GDP)	- 0.4 73.5 - 0.4 1.3 72.0 / 58.6 15.2 / 17.2 11 667.6 / 8.1 483.1 j 16.2	- 0.1 73.7 -~0.0 1.4 73.7 / 61.0 14.9 / 18.0 11 194.7 / 7.8 132.6j 10.7	0.1 ^b 74.4 0.2 ^b 1.7 ^b 75.9 / 64.7 ^b 17.8 / 21.5 ^a 11 651.5 / 8.1 ^c 282.6 ^c 8.3 ^b
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ Life expectancy at birth (females/males, years) ⁱ Population age distribution (0-14/60+ years old, %) International migrant stock (000/% of total pop.) Refugees and others of concern to the UNHCR (000) Infant mortality rate (per 1 000 live births) ⁱ	- 0.4 73.5 - 0.4 1.3 72.0 / 58.6 15.2 / 17.2 11 667.6 / 8.1 483.1 j 16.2	- 0.1 73.7 -~0.0 1.4 73.7 / 61.0 14.9 / 18.0 11 194.7 / 7.8 132.6j 10.7 5.3	0.1 ^b 74.4 0.2 ^b 1.7 ^b 75.9 / 64.7 ^b 17.8 / 21.5 ^a 11 651.5 / 8.1 ^c 282.6 ^c 8.3 ^b 5.6 ^{k,b}
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ Life expectancy at birth (females/males, years) ⁱ Population age distribution (0-14/60+ years old, %) International migrant stock (000/% of total pop.) Refugees and others of concern to the UNHCR (000) Infant mortality rate (per 1 000 live births) ⁱ Health: Current expenditure (% of GDP) Health: Physicians (per 1 000 pop.)	- 0.4 73.5 - 0.4 1.3 72.0 / 58.6 15.2 / 17.2 11 667.6 / 8.1 483.1 j 16.2 5.1 	- 0.1 73.7 -~0.0 1.4 73.7 / 61.0 14.9 / 18.0 11 194.7 / 7.8 132.6j 10.7 5.3 5.0	0.1 ^b 74.4 0.2 ^b 1.7 ^b 75.9 / 64.7 ^b 17.8 / 21.5 ^a 11 651.5 / 8.1 ^c 282.6 ^c 8.3 ^b 5.6 ^{k,b} 4.0 ^b
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ Life expectancy at birth (females/males, years) ⁱ Population age distribution (0-14/60+ years old, %) International migrant stock (000/% of total pop.) Refugees and others of concern to the UNHCR (000) Infant mortality rate (per 1 000 live births) ⁱ Health: Current expenditure (% of GDP) Health: Physicians (per 1 000 pop.) Education: Government expenditure (% of GDP)	- 0.4 73.5 - 0.4 1.3 72.0 / 58.6 15.2 / 17.2 11 667.6 / 8.1 483.1 j 16.2 5.1 3.8	- 0.1 73.7 -~0.0 1.4 73.7 / 61.0 14.9 / 18.0 11 194.7 / 7.8 132.6j 10.7 5.3 5.0 4.1 ¹	0.1 ^b 74.4 0.2 ^b 1.7 ^b 75.9 / 64.7 ^b 17.8 / 21.5 ^a 11 651.5 / 8.1 ^c 282.6 ^c 8.3 ^b 5.6 ^{k,b} 4.0 ^b 3.8 ^m
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ Life expectancy at birth (females/males, years) ⁱ Population age distribution (0-14/60+ years old, %) International migrant stock (000/% of total pop.) Refugees and others of concern to the UNHCR (000) Infant mortality rate (per 1 000 live births) ⁱ Health: Current expenditure (% of GDP) Health: Physicians (per 1 000 pop.) Education: Government expenditure (% of GDP) Education: Primary gross enrol. ratio (f/m per 100 pop.)	- 0.4 73.5 - 0.4 1.3 72.0 / 58.6 15.2 / 17.2 11 667.6 / 8.1 483.1 j 16.2 5.1 3.8 95.4 / 95.2	- 0.1 73.7 -~0.0 1.4 73.7 / 61.0 14.9 / 18.0 11 194.7 / 7.8 132.6j 10.7 5.3 5.0 4.1 ¹ 99.5 / 99.0 ⁿ	0.1 ^b 74.4 0.2 ^b 1.7 ^b 75.9 / 64.7 ^b 17.8 / 21.5 ^a 11 651.5 / 8.1 ^c 282.6 ^c 8.3 ^b 5.6 ^{k,b} 4.0 ^b 3.8 ^m 102.3 / 101.8 ^d
Social indicators Population growth rate (average annual %) ⁱ Urban population (% of total population) Urban population growth rate (average annual %) ⁱ Fertility rate, total (live births per woman) ⁱ Life expectancy at birth (females/males, years) ⁱ Population age distribution (0-14/60+ years old, %) International migrant stock (000/% of total pop.) Refugees and others of concern to the UNHCR (000) Infant mortality rate (per 1 000 live births) ⁱ Health: Current expenditure (% of GDP) Health: Physicians (per 1 000 pop.) Education: Government expenditure (% of GDP) Education: Primary gross enrol. ratio (f/m per 100 pop.)	- 0.4 73.5 - 0.4 1.3 72.0 / 58.6 15.2 / 17.2 11 667.6 / 8.1 483.1 j 16.2 5.1 3.8 95.4 / 95.2 82.5 / 83.4	- 0.1 73.7 -~0.0 1.4 73.7 / 61.0 14.9 / 18.0 11 194.7 / 7.8 132.6 ^j 10.7 5.3 5.0 4.1 ¹ 99.5 / 99.0 ⁿ 84.3 / 85.7 ⁿ	0.1 ^b 74.4 0.2 ^b 1.7 ^b 75.9 / 64.7 ^b 17.8 / 21.5 ^a 11 651.5 / 8.1 ^c 282.6 ^c 8.3 ^b 5.6 ^{k,b} 4.0 ^b 3.8 ^m 102.3 / 101.8 ^d 104.0 / 105.6 ^d

Looking at social indicators, Turkey had a 1.6% population increase in 2018, while in Russia this ratio was roughly 0.1%. The historical population decrease trend in the Russian Federation are now followed by very small ratios of increase, which turned out to be one of the most pressing issues of the Russian Federation. In terms of health sector, the Russian Federation is in a better state than Turkey. While infant mortality rate in Turkey is 12.6 per mille, this rate is 8.3 per mille in the Russian Federation. Turkey allocates 4.1% of the GDP for its health sector,



while Russia allocates 5.6% for the same. The number of doctors per a thousand citizens is 1.7 in Turkey and 4 in the Russian Federation. The resources allocated from GDP for education was 4.4% in Turkey in 2018, while it was 3.8% in the Russian Federation. This rate entered a rising trend in 2018. This rate was constantly about 3.8% in the Russian Federation in the past years, while 3% in Turkey.

Table 5: Comparing Turkey and the Russian Federation in terms of Environment and Infrastructure Indicators

Turkey

Environment and infrastructure indicators	2005	2010	2018
Individuals using the Internet (per 100 inhabitants)	15.5 ^{r,s}	39.8 ^{r,s}	58.3 ^e
Research & Development expenditure (% of GDP)	0.6	0.8	1.0 ^k
Threatened species (number)	92 °	150	388 ^d
Forested area (% of land area)	13.9	14.6	15.2 ^b
CO2 emission estimates (million tons/tons per capita)	237.4 / 3.5	298.0 / 4.1	346.0 / 4.5 ^k
Energy production, primary (Petajoules)	1 004	1 352	1 314 ^b
Energy supply per capita (Gigajoules)	52	61	68 ^b
Tourist/visitor arrivals at national borders (000)	20 273	31 364 ^t	30 289 ^{t,e}
Important sites for terrestrial biodiversity protected (%)	2.1	2.2	2.3
Pop. using improved drinking water (urban/rural, %)	98.3 / 90.3	99.7 / 95.9	100.0 / 100.0 ^b
Pop. using improved sanitation facilities (urban/rural, %)	97.3 / 76.5	97.8 / 81.0	98.3 / 85.5 ^b
Net Official Development Assist. disbursed (% of GNI)	0.17	0.13	0.95 ^{u,d}
Net Official Development Assist. received (% of GNI)	0.08	0.14	0.43 ^e

Russian Federation

Environment and infrastructure indicators	2005	2010	2018
Individuals using the Internet (per 100 inhabitants)	15.2	43.0 ^q	76.4 ^{r,s,d}
Research & Development expenditure (% of GDP)	1.1	1.1	1.1 ^b
Threatened species (number)	151 ^t	126	235 °
Forested area (% of land area)	49.4	49.8 ^e	49.8 ^{e,b}
CO2 emission estimates (million tons/tons per capita)	1 615.1 / 11.2	1 670.5 / 11.7	1 705.3 / 11.9 ^g
Energy production, primary (Petajoules)	50 506	53 679	56 024 ^b
Energy supply per capita (Gigajoules)	190	202	208 ^b
Tourist/visitor arrivals at national borders (000)	22 201	22 281	24 571 ^d
Important sites for terrestrial biodiversity protected (%)	26.8	26.8	26.9
Pop. using improved drinking water (urban/rural, %)	98.5 / 87.6	98.7 / 89.6	98.9 / 91.2 ^b
Pop. using improved sanitation facilities (urban/rural, %)	77.3 / 58.6	77.1 / 58.7	77.0 / 58.7 ^b
Net Official Development Assist. disbursed (% of GNI)		0.03	0.08 u,v,c

Economic Relations between Turkey and Russia

Trade

While a majority of the trade between Turkey and Russia consists of natural gas imports by Turkey, other elements of exports and imports still total billions of dollars. Russia is among Turkey's major trade partners. The Russian Federation is the most country against whom Turkey has been having the most foreign trade deficit since 2000s. This deficit largely stems from trades of mineral fuel, oils and products derived thereof by distilling, together with

processed goods in certain categories. Turkey has superiority in terms of machines and vehicles, various manufacture items and livestock, while the Russian Federation is superior in terms of products derived by distilling mineral fuels, oils, etc.

Russia - Turkey	Turkey - Russia
Oil - Natural gas	Textile
Oil products	Food
Seeds - grains	Automotive industry
Iron-steel	Other semi-finished goods
Coal	Chemicals

Table 6: Economic Relations between Turkey and Russia

Turkey has constantly been in a foreign trade deficit and since the beginning of 2000s, most of this deficit stems from trades with the Russian Federation. The Russian Federation had been the topmost country where Turkey did their exports from until 2011, and exports to this country have been comparatively too sparse to be fulfilling. Maybe the most important gain in the recent years in economical relations between the two countries has been that the path of Russian natural gas to Turkey and other countries follows the Blue Current, and then the Turkish Current. Unfortunately, right after the fighter jet crisis the Turkish Current project was cancelled by the orders of Vladimir Putin, the Russian Head of State. After a certain time, Putin stated that Russia was not intending to give up projects that were to Russia's benefit.

Table 7: Turkey's imports from Russian Federation

Product code	Product label	Turkey's imports from Russian Federation				
Flouncecoue		Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018
'TOTAL	All products	25288597	20399806	15162386	19514094	21989582

Table 8: Turkey's imports from Russian Federation

Product label	2018	%
Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral	13,070,425	59.434
Iron and steel	3,930,673	17.874
Cereals	1,396,262	6.349
Copper and articles thereof	648,255	2.948
Aluminium and articles thereof	620,720	2.823
Residues and waste from the food industries; prepared animal fodder	283,908	1.291
Organic chemicals	273,125	1.242
Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal	255,128	1.160



RECENTLY TURKEY-RUSSIAN FEDERATION ECONOMIC RELATIONS (OPPORTUNITIES AND ISSUES)

Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals,	244,329	1.111
Paper and paperboard; articles of paper pulp, of paper or of paperboard	147,088	0.669
Ores, slag and ash	138,860	0.631
Fertilisers	137,993	0.627
Lead and articles thereof	101,129	0.460
Wood and articles of wood; wood charcoal	82,550	0.375
Rubber and articles thereof	70,724	0.322
Plastics and articles thereof	65,403	0.297

Table 9: Turkey's imports from Russian Federation / Turkey's imports

Product label	Turkey's imports from Russian Federation / Turkey's imports from world
Cereals	68.94
Lead and articles thereof	31.22
Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral	30.39
Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal	22.02
Iron and steel	21.36
Residues and waste from the food industries; prepared animal fodder	19.63
Copper and articles thereof	19.39
Sugars and sugar confectionery	18.37
Aluminium and articles thereof	16.03
Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals,	15.73
Nickel and articles thereof	13.82
Fertilisers	11.36
Ores, slag and ash	10.88
Wood and articles of wood; wood charcoal	9.97
Edible vegetables and certain roots and tubers	7.69

Products of the milling industry; malt; starches; inulin; wheat gluten	6.60
Beverages, spirits and vinegar	5.79
Paper and paperboard; articles of paper pulp, of paper or of paperboard	5.35
Organic chemicals	4.57
Tobacco and manufactured tobacco substitutes	3.85
Zinc and articles thereof	3.83
Furskins and artificial fur; manufactures thereof	3.61
Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	3.04
All products	9.86

Comparing Turkey's exports performance, it is observed that the areas of growth are industrial products rather than sales of raw materials or agricultural products. On the other hand, Russia has had important gains in the same period in terms of energy products and raw materials exports. In this sense, the economies of both countries complement each other.

Turkey is largely foreign-dependent in terms of raw materials, intermediate goods and especially energy. This leads to foreign trade deficit which is on a constant increase. The role of the Russian Federation is undeniably large in this deficit, because they are among the important trade partners of Turkey.

Turkey's foreign dependence in terms of raw materials, intermediate goods and especially energy leads to a constant deficit in the country's foreign trade balance. The products with the largest share in Turkey's foreign trade deficit are, in order, mineral fuels, oils and alkali products, machines and vehicles and products of chemistry industry and supporting industries and approximately half of the country's foreign trade deficit stems from the trade of mineral fuels, oils and alkali products.

A significant part of Turkey's foreign trade deficit is caused by trades with the Russian Federation, followed by those with China and the USA. There is an increasing requirement in Turkey for energy due to increasing production and population, and almost all of this energy is procured via exports. Turkey especially acquires almost all natural gas they need from the Russian Federation. This energy imports from the Russian Federation lead to considerable foreign trade deficits for Turkey. The products which have the highest ratio in Turkey's foreign trade deficit, namely mineral fuels, oils and alkali products, also hold the first place, 90% in numbers, among the reasons leading to the foreign trade deficits caused by Turkey's trade with the Russian Federation. While Ankara brought up this issue of imbalance in all of their communications with Moscow, the Russian officials always responded to this by stating that this imbalance is compensated for via Turkish investments in the construction sector, shuttle trade and tourism.



Table 10: Turkey's exports to Russian Federation

Product code		Turkey's exports to Russian Federation				
		Value in 2014	Value in 2015	Value in 2016	Value in 2017	Value in 2018
TOTAL	All products	5943014	3589464	1732954	2734316	3401194

Table 11: Turkey's exports to Russian Federation

Product label	2018	%
Edible fruit and nuts; peel of citrus fruit or melons	636,098	18.691
Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	400,875	11.779
Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	335,693	9.864
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television	164,833	4.843
Plastics and articles thereof	147,783	4.342
Footwear, gaiters and the like; parts of such articles	131,606	3.867
Articles of apparel and clothing accessories, knitted or crocheted	110,961	3.260
Articles of apparel and clothing accessories, not knitted or crocheted	104,176	3.061
Articles of iron or steel	89,178	2.620
Knitted or crocheted fabrics	84,484	2.482
Edible vegetables and certain roots and tubers	73,783	2.168
Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral	70,794	2.080
Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings;	69,425	2.040
Fish and crustaceans, molluscs and other aquatic invertebrates	68,493	2.013
Miscellaneous articles of base metal	62,872	1.847
Rubber and articles thereof	59,814	1.758
Salt; sulphur; earths and stone; plastering materials, lime and cement	44,592	1.310
Inorganic chemicals; organic or inorganic compounds of precious metals, of rare- earth metals,	41,987	1.234
Man-made staple fibres	37,478	1.101
Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial	37,357	1.098
Furskins and artificial fur; manufactures thereof	34,532	1.015
Iron and steel	31,670	0.931

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Product label	Turkey's exports to Russian Federation/Turkey's exports to world
Cork and articles of cork	27.83
Furskins and artificial fur; manufactures thereof	19.85
Edible fruit and nuts; peel of citrus fruit or melons	16.06
Footwear, gaiters and the like; parts of such articles	14.83
Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal	8.22
Fish and crustaceans, molluscs and other aquatic invertebrates	7.79
Miscellaneous articles of base metal	6.79
Edible vegetables and certain roots and tubers	6.79
Knitted or crocheted fabrics	5.50
Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial	4.65
Albuminoidal substances; modified starches; glues; enzymes	4.61
Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles	4.28
Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal	4.15
Miscellaneous chemical products	4.03
All products	2.02

Table 12: Turkey's exports to Russian Federation/Turkey's exports to world

Looking at the trade between the two countries, Turkey is comparatively in a superior position in terms of products such as coffee, tea, cocoa, spice and spice products, travel items, hand bags and other similar carrying items, shoes and shoe parts, fruits and vegetables, clothes and cloth accessories, motorized land vehicles, bicycles and motorcycles, their parts and components, animal and herbal fertilizers, mineral substances such as salt, sulphur, pellet and plaster, prefabricated structures, sanitation systems, heating and fixed lighting devices, textile products, power-generating machines and tools, fish and other marine products, medical and pharmaceutical products, furniture, bedding, bedding braces and pillows, electric machines, devices and tools and spare parts for them. On the other hand, Russia is comparatively superior in terms of petrol gases, natural gas and other produced gases, hard coal, coking coal and briquette coal, nutrients for animals, mineral chemical fertilizers, grains, grain products, herbal liquid oils and their fractions, non-ferrous mines, oil and oil-derived products. The Russian Federation holds a clear superiority in capital-intensive goods. While the trade of livestock, food, chemical industry products not stated elsewhere and processed goods of certain categories make up intra-industry trade, other categories of goods, especially mineral fuels, oils and oil derivatives produced by distilling, make up inter-industry trade.



YEAR	IMPORT	EXPORT	VOLUME	BALANCE	IMP/EXP
1992	1.040.806	441.835	1.482.641	-598.971	2,36
1993	1.542.319	505.277	2.047.596	-1.037.041	3,05
1994	1.044.900	820.195	1.865.095	-224.705	1,27
1995	2.082.365	1.232.042	3.314.407	-850.323	1,69
1996	1.900.218	1.494.434	3.394.652	-405.784	1,27
1997	2.174.235	2.056.470	4.230.706	-117.765	1,06
1998	2.154.971	1.347.469	3.502.440	-807.502	1,60
1999	2.374.101	588.603	2.962.705	-1.785.498	4,03
2000	3.879.866	639.079	4.518.945	-3.240.787	6,07
2001	3.435.673	924.107	4.359.779	-2.511.566	3,72
2002	3.863.179	1.168.309	5.031.489	-2.694.870	3,31
2003	5.451.315	1.367.591	6.818.906	-4.083.725	3,99
2004	9.033.138	1.859.187	10.892.325	-7.173.952	4,86
2005	12.905.620	2.377.050	15.282.670	-10.528.570	5,43
2006	17.806.239	3.237.611	21.043.850	-14.568.627	5,50
2007	23.508.494	4.726.853	28.235.347	-18.781.641	4,97
2008	31.364.477	6.483.004	37.847.480	-24.881.473	4,84
2009	19.450.086	3.189.607	22.639.693	-16.260.478	6,10
2010	21.600.641	4.628.153	26.228.794	-16.972.488	4,67
2011	23.952.914	5.992.633	29.945.548	-17.960.281	4,00
2012	26.625.286	6.680.777	33.306.063	-19.944.509	3,99
2013	25.064.214	6.964.209	32.028.423	-18.100.004	3,60
2014	25.288.597	5.943.014	31.231.611	-19.345.583	4,26
2015	20.399.806	3.589.464	23.989.270	-16.810.342	5,68
2016	15.162.386	1.732.954	16.895.340	-13.429.432	8,75
2017	19.514.094	2.734.316	22.248.410	-16.779.778	7,14
2018	21.989.571	3.401.617	25.391.188	-18.587.954	6,46

Table 13: Turkey's Foreign Trade with the Russian Federation (Thousand \$)



Looking at Turkey's total trade with the Russian Federation, Turkey suffers a striking foreign trade deficit as stated earlier in the paper. By 2018 figures, total imports are 22 billion USD, while total exports are 3.4 billion USD.







While the total trade volume reached up to 25.4 billion USD by 2018, foreign trade deficit is 18.6 billion USD. Imports are roughly 6.5 times the exports by 2018 and this ratio was 8.75 times in 2016.



Energy

The Russian natural gas is the most important agenda item for the relationship between Russia and Turkey. The same goes for many other countries neighboring Russia. Thanks to its abundant natural resources, Russian economy yields foreign trade surplus every year. The country's exports reached up to 225 billion USD in the first 11 months of 2016 and this figure is mostly made up by natural gas, oil and other heavy metals. Oil and natural gas resources bring huge income to Russia by way of energy exports, while at the same time holding an important place in the country's foreign relations.





TURKEY'S NATURAL GAS TRADE (2015)

Turkey currently imports half of the energy resources they consume, and the energy policies in effect in the country are largely affected by the structure of the global energy sector. The primary energy currently in consumption in Turkey is procured from oil by 39%, natural gas by 27%, coal by 27% and renewable energy resources by 13%. The share of imports in energy consumption is roughly 70%. Beside the high level of foreign dependence in terms of energy, 65% of the natural gas exports is from Russia (Bayraç, 2009). Hence Russia is in a critical standing in terms of fulfilling Turkey's energy requirements. The largest share in Turkey's imports from Russia is of petroleum gases and natural gas.

Tourism

Another important element of Turkish-Russian relations is tourism. To elaborate, millions of Russian tourists, who choose Turkey as their destination for vacation every year, are an important element in Ankara's relations with Kremlin. Another important commercial means between Turkey and Russia is tourism. The cooperation agreement between the countries seems to have positively affected the tourism sector at a large scale.

Years	Total Incoming	Tourists from Russia Total Income Income from F		Income from Russian
	Tourists		(thousand USD)	Tourists (thousand USD)
2012	36,463,921	2,647,090	29,007,003	2,105,757
2013	39,226,226	3,049,036	32,308,991	2,511,363
2014	41,415,070	3,451,749	34,305,904	2,859,234
2015	41,617,531	2,842,972	31,464,777	2,149,418
2016	31,365,330	683,335	22,107,440	481,640

Table 14: Yearly Distribution of Tourists in Turkey

Construction

The total value of construction projects undertaken by the Turkish contracting sector up till now is approximately 64 million USD. Roughly 20% of the projects undertaken by the Turkish contracting sector is located in Russia. Hence Russia is among the countries in the world where Turkish contracting companies undertake most projects. The Turkish contracting sector undertook 4.3 billion USD-worth of projects in Russia in 2015. After the fighter jet crisis a very unproductive period started for the Turkish contracting sector, when certain economical

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blockages were applied against Turkey which included prohibiting Turkish companies' activities in contracting and consultancy, and also the Turkish citizens in the country were subjected to unusual administrative measures (Moskova 2017). Although the Russian government naturally supports their own companies, the state still needs the expertise and technology of some western companies in certain areas. Because Russian companies have not yet developed to a desired level to eradicate this dependency.

3. CONCLUSION

The products Turkey and the Russian Federation sells to the international market are very different from each other. This difference leads to a very low export similarity index between the two countries. In other words, Turkey and the Russian Federation show similarities in terms of foreign trade structure. The main reason leading to Turkey's foreign trade deficit in their trades with the Russian Federation is Turkey's energy imports. Turkey also has an increasing need for energy, therefore it does not seem possible, at least in the short term, for the country to reduce this deficit. In order to reduce the country's foreign dependency in terms of energy, Turkey should be widespreading energy-saving solutions while transitioning to alternative energy resources.

If the country can reduce energy importation together with the cost, this will greatly help balancing the present foreign trade deficit. A two-stage analysis indicates that Turkey as a country is highly foreign dependent in terms of natural resources and raw materials. In addition, there is a gradually increasing disadvantage in capital-intensive categories of goods. On the other hand, Turkey holds superiority in the availability of animal products, tea, coffee, etc. and effort-intensive categories of goods. Special measures should be taken for the categories of goods, procurement of which brings Turkey disadvantages, such as coal, natural gas and their derivatives. In order to turn the disadvantage in these categories into advantage, searches and surveys for natural gas and coal should be intensified. In addition, productivity of the gas and coal mines currently in use should be increased.

Another point of study should be nutrients for animals; the situation requires that as a country of agriculture and stockbreeding, Turkey should be taking special measures for this category of goods. A special incentive program can be implemented for this goods. Production for exports can be encouraged. In addition, new lands should be opened for agriculture and agriculture lands currently in use should be transitioned to more modern agriculture methods in order to prevent price increases in this category of goods. Incentives for stockbreeding should also be re-studied and new incentives for exports should be created.

Looking at the general characteristics of economic relationships, majority of the trade between Turkey and Russia consists of primary energy resources which Turkey imports from Russia. Other goods are randomly distributed in the comparative superiority stances between the two countries. The trade of primary energy resources between Turkey and Russia is a trade type which generally occurs between complementary economies. Therefore compensating the foreign trade deficit with this country will also depend on Turkey's success in their policies directed to prevent foreign dependency in the long term.

The two topmost countries where Russia imports from are China and Germany. China and Germany are primary actors in the world in terms of low-tech and high-tech respectively. While Germany highly invests in innovative technologies in order to preserve its leading position,



China spends efforts to preserve its cost-efficiency advantage by developing new competition strategies. Looking at the performances of these countries in their trades with Russia, when considering the geographical proximity between Turkey and Russia, a 100-billion-USD trade volume can be achieved. If the advantage in freight costs can be backed with sectoral diversity and a free environment of mobilization, the Turkish-Russian trade can hold vast potential. However still, both countries need strategies that can mutually support their competitive advantages. This would bring competition power to Russia against Turkey, China and Germany, while preserving their market share and expand their trade volume. In this sense, Russia's membership to the World Trade Organization can be evaluated as an opportunity for Turkey, but with inherent risks. Elimination of obstacles to membership and implementation of certain standards granted Turkish entrepreneurs the ability to carry activities in a competitive Russian market. However, considering the existence of actors such as China and Germany, more wholistic policies would be needed to utilize this advantage in the long term.

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