# **University of Economics, Prague International Business**



Investment climate in Russia in energy and agricultural sectors from the perspective of opportunities for foreign direct investment

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<b>Declaration:</b>	
I hereby declare that I am the sole author of the thesis entitled "Invest	ment climate in
Russia in energy and agricultural sectors from the perspective of oppo	ortunities for foreign
direct investment ". I duly marked out all quotations. The used literatu	are and sources are
stated in the attached list of references.	
In Day A mail 22, 2019	A
In Prague on April 23, 2018	Anastasiia Evseeva

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#### Introduction

The recent import ban introduced by the Russian government and the imposed sanctions make it impossible for Russia to fully participate in international trade. To overcome this obstacle, international organizations may consider foreign direct investment as an opportunity to increase the company's profit with the use of resources from Russia. Foreign Direct Investment (FDI) means owning at least 10 percent of the company's ordinary or voting shares and is thought to be advantageous for both the host country and the foreign investor. The company, wishing to establish business operations or to acquire assets in a foreign country will gain access to resources, finance and new market. At the same time, the host country will benefit from higher tax revenue, technology transfer, increasing living standards, as well as higher employment for its citizens. However, FDI also represents potential risks for the investors, such as high production and operating costs, low trade revenue and operating performance threats connected with the differences in legislations (taxation, accounting, trade restrictions). For the managerial decision making, it is vital to consider both sides of the coin. Russian Federation can be considered as an advantageous destination for the FDI, as there are opportunities open for the investment, while at the same time FDI is important for the future development of Russia.

I have selected the following topic due to the personal interest in the field of investment decision-making. My native region is Kursk Region, which has significant TNC's operating in the area, namely Ekosem-Agrar GmbH, SAMEDEUTZ-FAHR, Charoen Pokphand Foods PCL. and Pepsico. Still, the development of the region slowed down, and new investment and technology transfer is needed. Even though the economic and political situation in Russia is uncertain, and the available information regarding the investment opportunities is limited, I aspire to promote FDI into Russia.

The goal of the thesis is to identify investment opportunities in the Russian agricultural and energy sectors, based on the SWOT analysis. The SWOT analysis is chosen as the most suitable tool of evaluation of the investment climate, used for the demonstration of the possible limitations to FDI investment into Russia, as well as opportunities and strengths which may encourage the establishment of business operations in Russia. The analysis will highlight all four pillars.

As for the choice of sectors, according to the U.S. Energy Information Administration, Russia is the world's leading producer of crude oil and the second most significant producer of dry natural gas. However, the economic sanctions and fluctuating oil prices have undermined the confidence of foreign investors. This is the reason, why I have decided to illustrate the profitability of investment into the energy sector. For the paper to be comprehensive and include practical analysis for the future investors, I will put a primary focus on the oil and gas industry, as the main drivers of the Russian economy. Agricultural industry has been selected for evaluation because of its pace of growth and the increasing importance to the economy.

The goal of the first chapter is to demonstrate the agricultural sector, including the economic indicators, operating companies, regions of productions and development of the sector over time. The second chapter is aiming at providing readers with the understanding of the investment climate in Russia in agricultural sector, based on the SWOT analysis. Following that, the third chapter is intended to describe the energy sector in Russia. This chapter will include economic indicators, operating companies, exploration regions and trade partners. Afterwards, chapter four is aimed at preparing the SWOT analysis for energy sector to be used in decision-making process by future investors.

To complete the thesis, I will apply SWOT and academic analysis using the data and statistics from World Bank Organization, Invest in Russia Organization website, Deloitte reports, Russian Direct Investment Fund articles, as well as news portals, along with comparative statistics from the Federal State Statistics Service and electronic sources of VSE library.

Hypothetically, I believe that there is a number of present investment opportunities in both sectors, however, the existing threats and shortcomings in both sectors may hinder FDI into Russia or bring little profit in the future.

# Chapter 1: Agricultural Sector Description 1.1 Development since 1990

Following the collapse of the Soviet Union, the development of agriculture in Russia was profoundly shaped and influenced by the overall transformation of the economic sector. Those transformations can be divided into the different time periods, each with a unique agricultural policy framework. The first period, between 1991 and 1994 was shaped by the disintegration of the centrally-planned economy and rapid market liberalization in all sectors and spheres, including the agricultural sector (FAO, 2011). This phenomenon meant that all forms of state support were demolished. In that period government relied on trade policy to guarantee stable and satisfactory supplies by promoting importation and restricting exportation (Serova & Shick, 2007).

The second phase dated between 1994 and 1998, at the period of implementation of the more protectionist measures in agriculture. Those protectionist policies guaranteed minimum prices to producers, imposed barriers on importation and subsidized exportation. As the economic situation in Russia stabilized following the collapse of the old economic system and agricultural producers gained more experience in operating under the market economy, agricultural policy again became more protectionist, and a greater share of state budget in the form of subsidies was designated to agricultural activities (Graph 4 in Annexes). "Orientation towards import substitution was reinforced by the adaptation of a Doctrine on Food Security in the wake of the spike in food prices during 2007 - 2008, setting self - sufficiency targets for the main food products consumed in Russia" (FAO, 2011: 5).

Currently, the Government of Russia supports agricultural sector by the mean of subsidizing private enterprises, regions and projects. To reach the set target, various state projects and initiatives promote the increase of production and export of core produced agricultural commodities, which will lead to a further development and higher revenues for the sector. For instance, the State Programme for Development of Agriculture 2013-20 is a formal program signed by the highest representatives of Russia, which is focused on food independence for Russia, import substitution for meat (pork, poultry, cattle), milk, open field and green-house vegetables, seed potato, fruits and berries, and finally, promoting the competitiveness of Russian agricultural products. (Gray, 2017)

#### 1.2 Economic Indicators

The role and pace of development of agriculture in Russia has been steadily increasing. Table 1 demonstrates the growing share of agriculture in GDP of Russia. In 2017 Russian Agroindustry was the 8<sup>th</sup> largest industry in terms of GDP in nominal terms, reaching the value of 3,674 billion RUB. It can be forecasted that the share of Agriculture in GDP will increase even more, reaching the 7<sup>th</sup> place in the upcoming year, as there was no increase shown in "Construction" activities. At the same time, the value of agriculture increased by more than 200 billion RUB, while in 2014 the value of agriculture was only 2,549 billion RUB and was ranked 9th in the contribution to GDP, overcame by "Financial Activities" (Khasanov, 2017). That being said, over the past 10 years it is challenging to estimate a trend for the distribution of GDP across economic sectors and contribution of agriculture. Still, after the introduction if the import ban in 2014, agricultural sector showed a moderate increase in value and contribution to the GDP of the country. Table 11 in Annexes indicates that in 2016 the agriculture accounted for 4,74 percent of the GDP of Russia, displaying an uprising trend after a slight drop in 2012 to 3,67 percent. However, over the past 10 years the share of agriculture in GDP has been fluctuating: decreasing till 2012, then recovering since 2013. However, comparing the data from 2006 and 2016, it is clear that the share of agriculture increased, even though the growth was moderate.

Table 1:GDP in Nominal Terms, current prices RUB billion.

Industry	2016	2015
Real Estate	13,314	12,975
Commerce	12,390	12,274
Manufacturing	10,636	10,294
Mining	7,297	7,218
Public Administration	6,102	5,823
Transport and Communications	6,067	5,799
Construction	4,781	4,780
Agriculture (including fishing)	3,674	3,408
Financial Activities	3,455	2,921
Healthcare	2,921	2,789
Energy	2,416	2,223
Education	2,011	1,936
Hotels and Restaurants	649	638

Source: Khasanov, 2017

Regarding the rate of participation of workforce in agricultural sector, the figure has been falling steadily during the period of the past 10 years (Table 2). The share of services in the economy, for example real estate, commerce and financial activities, overpowered the share of both industry and agriculture in terms of employment and share in GDP. As a result, most population is employed in the services' sector of the Russian economy. In 2015 the rate of employment in agricultural sector decreased to 6,71 percent, which is a significant drop: over the last 10 years the employment in agricultural sector fell from 10,17 percent (Statista, 2016). The total number of population participating in agricultural activities in 2016 totaled to 4736 people (OECD, 2017).

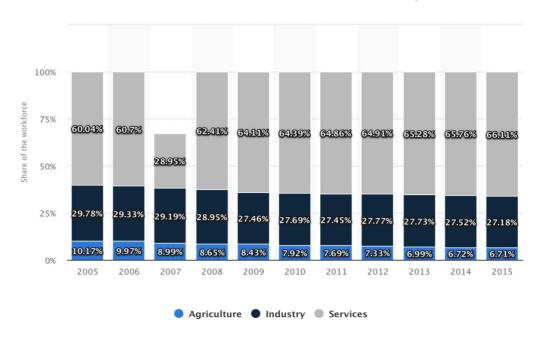


Table 2:Distribution of the workforce across economic sectors, 2005-2015.

Source: Statista Inc., 2016

According to the Food and Agriculture Organization of the United Nations (FAO) (2017), total agricultural area in Russia amounts to 217 million hectares (MHA), which represents only 13,5 percent of the total land. However, not all agricultural land is used for the agricultural activities. The arable land index, which includes land under temporary crops, temporary meadows for pastures or mowing, and land under market or kitchen gardens, showed a weakening trend: in 2015 only 123,1 million hectares (MHA) were used for agriculture (World Bank Data, 2017).

#### 1.3 Production

Russia produces a large variety of agricultural commodities: from fish and meat to grains and oils. The most yielded agricultural commodities are grains, sugar beet, sunflower seeds, potatoes and vegetables. The yield of grains has increased sharply over the past years and reached its peak in 2016 with 120,7 million tons harvested. A steady development is also shown by vegetables, sugar beet and soybeans (Table 3). Grains, as one the most rapidly developing commodity, includes wheat, rye, maize, buckwheat and rice (Table 12 in Annexes). Comparing data, it is noticeable that a positive advancement was shown only by wheat and rice commodities. The yield of wheat reached its peak in 2016, with 73,6 million tons harvested. Over the past 20 years, the yield of barley, oats and rye decreased sharply. This trend may be connected to the slight decline in agricultural land and population participation in agricultural activities.

Table 3: Gross harvest and yield of basic agricultural crops, enterprises of all types.

	1992	2000	2005	2010	2012	2013	2014	2015	2016
	Gross harvest, mln. ton								
Grains (weight after processing)	1069	65.4	77.8	61.0	70.9	92.4	105.3	104.8	120.7
Sugar beet	25.5	14.1	21.3	22.3	45.1	39.3	33.5	39.0	51.4
Oil crops seeds 1)	3.9	4.5	7.6	7.5	10.6	13.1	12.9	13.8	16.3
of which:									
sunflower seeds	3.1	3.9	6.5	5.3	7.5	9.8	8.5	9.3	11.0
soybeans	0.5	0.3	0.7	1.2	1.7	1.5	2.4	2.7	3.1
winter and spring rape	0.2	0.1	0.3	0.7	0.9	1.3	1.3	1.0	1.0
Flax-fiber, thou. ton	78	51	56	35	46	39	37	45	41
Potatoes	38.3	29.5	28.1	21.1	29.5	30.2	31.5	33.6	31.1
Vegetables	10.0	10.8	11.3	12.1	14.6	14.7	15.5	16.1	16.3
Fruits, berries and grapes	3.4	3.0	2.7	2.5	2.9	3.4	3.5	3.4	3.9

Source: Federal State Statistics Service, 2017

#### 1.4 Main regions of production

According to the Federal State Statistics Service (FSSS), the most productive regions of Russia, in terms of agriculture are: Central region, Volga region and Southern region. The output of Central Region reached 1,3 trillion RUB in 2015, raising sharply since 2005. It can be said that the region reached its production peak in 2015. Main agricultural

commodities produced in this particular area are sugar beet and grains. The value of production of Volga Region amounted to 1,18 trillion RUB. Commodities produced here are eggs, milk and grains. Finally, the value of production of Southern Region in 2015 was 0,8 trillion RUB. South Region benefited mostly from the production of grains (Rada, et.al., 2017).

Picture 1:Russian Federation. Orange- Central Region. Violet- Northwest. Grey- South. Pink- Volga Region. Green- Ural. Yellow- Siberia. Red- Far East.



Source: USDA, Economic Research Service

The most productive districts in 2015 were Krasnodar, Rostov and Belgorod (Table 4). In 2015 the agricultural production in Krasnodar reached the value of 365 billion RUB. Belgorod region is known as the leader in production of livestock and poultry. It accounted for 13 percent of the total livestock and poultry production in 2016 (RDIF, 2017). Rostov stands among the leaders of grain and sunflower seeds production. About 20 percent of the total agricultural input of the Southern region is generated at Rostov district (FSSS, 2017).

Table 4:Main districts of production, mln. RUB.

Region	2005	2010	2011	2012	2013	2014	2015	Place
Krasnodar	97106	201554	239235	234524	254710	286518	365753	1
Rostov	61481	118106	149048	154676	161301	191316	244325	2
Belgorod	32691	98101	134620	149265	155402	188217	220692	3

Source: FSSS, 2017

#### 1.5 Business Environment

#### 1.5.1 Core operating and investing companies

Over 30 percent of total grains exportation is managed by five companies: TD RIF, MZK, Cargill, Aston and Louis Dreyfus. The largest grain exporter in 2016 was TD RIF, with 4,1 million tons of grains exported, however in comparison to 2015, the company slightly decreased its performance. On the other hand, the most dramatic increase in export was achieved by Aston and Cargill, increasing its grain exports by 50 and 42,1 percent respectively.

As for the greenhouse vegetables, there are five major companies which comprised 15 percent of total greenhouse vegetables produced: Yuzhniy, with total production of 0,05 million tons, Eco-Kultura, with 0,04 million tons, Zelenaya Liniya- 0,03 million tons, finally, Moskovskiy and Vyborjetz, both of which produced 0,02 million tons of greenhouse vegetables.

The leading companies which accounted for 20 percent of the total meat volume produced in 2016 are: Cherkizovo (0,6 million tons), Prioskolye (0,5 million tons), Miratorg (0,4 million tons), Belgrankorm (0,3 million tons) and Resurs (0,3 million tons).

Based on the revenue gained from agricultural production and sales (Table 5), the six largest private agricultural companies are: Sodruzhestvo (oilseed processing), Miratorg (meat production and processing), Efko (oilseeds processing), Cherkizovo (poultry and swine production), Rusagro (sugar, meat, cereals production) and Agro-Belogorye (swine production and processing). Miratorg and Efko showed the highest increase in revenue: 25 and 31 percent respectively. The most profitable company today is Sodruzhestvo, with the revenue of 2,6 billion USD.

Table 5:Top Russian agricultural companies by revenue, bln. USD.

	Sodruzhestvo	Miratorg	Efko	Czerkizovo	Rusagro	Agro- Belogorye
2015	1.6	1.4	1.2	1.1	1.0	0.9
2016	2.5	2.0	1.8	1.4	1.4	0.9
2016 vs	+19.7	+25.0	+31.2	+6.5	+16.7	-14.9
2015						

Source: RDIF, 2017

As for the foreigner investment activity in the sector, currently there are 65 investment projects announced for the Russian Federation in the agricultural sector. Among them, 37 projects have been announced just recently in 2017, and the implementation requires further negotiations on behalf of both the investor and the Russian Direct Investment Fund (RDIF). Some of the projects need to come to an agreement about the amount of funds, operating region and administrative area.

The biggest investments in monetary terms were made by the Mir Holding (Vietnam) and TH True Milk farming (Vietnam), both investing 2 billion USD. Another powerful competitor may emerge in the sphere of crop protection- Syngenta may start the local production of the crop protection facilities in Russia. Syngenta has already invested 1 billion RUB (17 million USD) in R&D projects in Russia, including 2 million USD spent on the Institute of Crop Protection in 2017. What is more, the K-energy of Korea intends to invest 3 billion RUB into creating a multi-purpose enterprise in Primorie to do business in agriculture, tourism and power development, according to the territorial government permission (Invest in Russia, 2017).

Finally, of the most interest and importance for me is the development of my home Kursk region. As stated in the introduction, Charoen Pokphand Foods Plc. (CPFoods) is operating in Kursk region and it contributes to the development of agricultural activities in Kursk and its suburban area by building two state-of-the-art fattening farms for 20,000 animals and a multiplying farm for 2,400 animals.

#### 1.5.2 Taxation system and legal restrictions

There exists a special tax regime in the agricultural sector for the producers of agricultural commodities and agriculture-related services- Unified Agricultural Tax (UAT). For the purposes of taxation, agricultural products include: crops, forestry products, livestock, including those obtained from the cultivation and growth of fish and other aquatic biological resources. But not only the producers of agricultural commodities are privileged to apply the UAT, starting from the 1<sup>st</sup> of January 2017 the UAT also includes organizations and individual entrepreneurs that provide services to agricultural producers in the field of crop production and livestock. UAT gives tax relieves from the corporate

tax, VAT tax and tax on property of the organization. UAT tax rate is 6 percent (FTS of Russia, 2018).

Investment in agriculture in Russia is not governed by specific laws and general investment rules are applied in the same way for any investor in any sector. Foreign companies or foreign investors can acquire over 50 per cent of control over the Russian agricultural entity. Foreign investors may also freely use their revenues and profits obtained from Russian-based investment projects for any purpose as long as they do not violate the law. However, if the investing company wants to own land, then Russian law places two primary restrictions on land ownership by foreigners. Firstly, land located in border areas or other specifically assigned sensitive territories is restricted from foreign ownership. Secondly, foreign citizens and foreign legal entities cannot own more than 50 percent of a plot of agricultural land, the alternative approach is the land lease contract for up to 49 years.

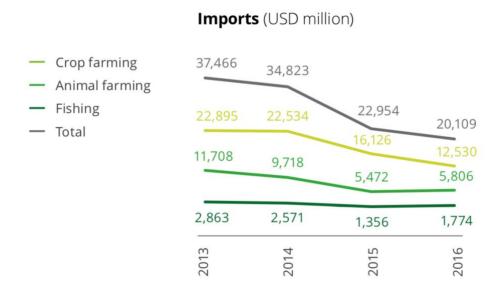
#### 1.5.3 Land Ownership

Today the most important massive of the arable land in the Southern and Central regions of Russia is fixed in the form of private ownership. Most of these lands are still in collective ownership of primary land share owners, new individual entrants, and corporations. The law states that "Foreign citizens, as well as Russian legal entities with more than 50 percent share of foreigners in their charter (joint-stock) capital, may possess land plots of the lands of agricultural destination only under the leasehold right" (Article 3 of Federal Law No. 101-FZ, 2002). Duration of land lease is up to 49 years, to be officially concluded with the land lease agreement and registered at the local registration chamber.

#### 1.6 Trade in agriculture

On 7 August 2014, the Government of the Russian Federation introduced import restrictions on a number of agricultural commodities originating from the United States of America, European Union countries, Canada, Australia, Norway, Ukraine, Albania, Montenegro, Iceland and Liechtenstein. The importation ban prohibits the import of meat products, including pork and cattle, fish, dairy products, fruits and vegetables, nuts and salt. The import ban has been recently prolonged till the 31<sup>st</sup> December 2018 (Government of the Russian Federation, 2017).

Graph 1: Value of agricultural imports to Russia.



Source: Deloitte Reports, 2017

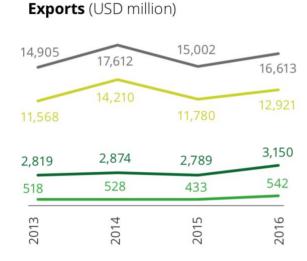
Table 15 in Annexes section illustrates the commodity structure of imports of the Russian Federation. Russia imports mainly machinery, chemical products and foodstuff (including the agricultural raw materials). Among the main imported agricultural products, crops had a dominant position, with the value of 20 billion USD of crops imported in 2016. The import of vegetables in 2016 accounted for 9,3 billion USD while the import value of animal products reached only 5,8 billion USD in 2016. Moreover, it is clear that after the introduction of the import ban, agricultural imports dropped substantially: declining after reaching its peak in 2013 with 37,5 billion USD to 20,1 billion USD in 2016. The import of animal farming products in 2016 also showed a rapid decline and was by half lower than in 2013- 5,8 billion USD.

Table 14 in Annexes demonstrates the major Russian export commodities. Food stuff and agricultural commodities represent only 6 percent of total export- 17 billion USD. Still, after a slight drop in 2014, the export of agricultural commodities has been increasing. According to WTO (2017), the value of imports of agricultural products increased by 5 percent, in comparison to 2015. At the same time, the value of imports of agricultural products has been steadily decreasing. In 2015 the value of all agricultural imports decreased by 33 percent in comparison to the previous year, while in 2016 it continued to

decline and fell by 6 more percent. Crops as an agricultural commodity, are the leaders in export.

This information is also supported by the latest WTO report (WTO, 2017) on the structure of Russian trade: wheat was the most exported commodity, reaching the 30 percent share in total agricultural exports from Russia. On the other hand, value of the citrus fruits imported to Russia was the highest- 1,16 billion USD. As for the trade in animal farming products, Russia mainly exports chickens (6,19 billion USD) and cattle (3,1 billion USD). The figure for imports is much higher, regardless of the import ban: the import of cattle reached 292 billion USD and chickens costed 52 billion USD to import (FAOSTAT,2017). According to the World Trade Organization (2017), the main export destinations of the agricultural products from Russia in 2015 were Turkey, European Union, Kazakhstan, Egypt and Belarus.

Graph 2: Value of agricultural exports.



Source: Deloitte Reports, 2017

# Chapter 2: SWOT Analysis for Agricultural Sector 2.1: Strengths

#### 2.1.1 Growing Agricultural Subsidies and State Program 2013-2020

One of the core strengths of the agricultural sector in Russia is the recent recognition of the importance of the sector to the economy and trade, and as a result, growing focus of the governmental programs on the development and prosperity of the sector. The Government of Russia supports agricultural sector by the mean of subsidizing private farms, regions and projects. Funds are available for anyone, as the law states that foreign investors and domestic investors have the same equal rights.

State Program for Development of Agriculture for 2013-20 is a formal program signed by the highest representatives of Russia, which is focused mainly on the food independence of Russia, as stated in the Doctrine of Food Security of the Russian Federation, import substitution of meat (pork, poultry, cattle), milk, open field and green-house vegetables, seed potato, fruits and berries; promotion of the competitiveness of Russian agricultural products in the world markets on the basis of innovative development of the agricultural complexes, and ensuring financial stability of commodity producers of the agricultural complexes (Gray, 2017). At the same time, various state programs promote the increase of production and export of certain agricultural commodities, which lead to further development of the sector. Detailed information regarding the state program is available on the website of the Ministry of Agriculture.

The support programs for agriculture were redesigned in 2017 based on the proposal made by the Minister Alexander Tkachuov, merging the 54 received subsidies into 7 core budget lines, named the "unified agricultural subsidies" (Gressel, 2017). Within the framework of the program, private investment promotion is defined as one of the core aspects. State is intended to promote private investment in the sector, spending an estimate of 91,7 billion RUB on the program "Encouragement of Investment in Agriculture". These money will be spend on the 3 core activities: investment credits, CAPEX reimbursement (Capital Expenditures Reimbursement) for selected projects, loans for the producers. The Ministry of Agriculture officially signed an agreement with Rosselkhozbank on the implementation of the preferential credit program for agri-business organizations.

Apart from that, the program also focuses on scientific support of the sector, profitability insurance, support of the development of infrastructure of the agro-food market, diversification of rural economy, increase of employment (State Program RF, 2017). All these sub-programs are aimed at attracting foreign investors into the agricultural sector, as well as the improvement of long-term competitiveness.

After the WTO accession in 2012, when under the rules of WTO Russia agreed to cut the state support to agriculture from 9 billion USD to almost 4 billion USD (Tochitskaya, 2012), it seems that Russian agricultural sector is recovering steadily, with the recent amendments of the State Program guaranteeing the increase of finance dedicated for the development of the sector. The volume of resource support for the implementation of the state program from the federal budget is present in Figure 1.

Figure 1: Federal budget expenditures on the State Program 2013-2020

2013	216,385,900.96 thousand RUB
2014	257,209,362.36 thousand RUB
2015	282,025,745.47 thousand RUB
2016	305 387 000,34 thousand RUB
2017	325 551 332,23 thousand RUB
2018	343,909,031.58 thousand RUB
2019	365 691 337,20 thousand RUB
2020	386,392,581.13 thousand RUB

Source: Government of the Russian Federation, 2017.

The amount of funds dedicated to the State Program 2013-20 has been growing steadily since 2013 and is planned to be increasing till the end of the implementation period. It is rather challenging to estimate the early results of the state program, as the data is limited and not available yet, some sources are only open to the official agricultural enterprises. Meanwhile, data available for the year 2013 indicates that the total amount of subsidies to farms exceeded the net incomes of the farms (Table 6). On the other hand, we can already investigate the results of the sub-program "Development of the sub-sector of crop production, processing and marketing of crop products" and other production-related programs: one of the objectives is the stimulation of the growth of production of the main types of agricultural products. This target has been achieved already in 2017, by grains, sugar beet and oilseeds (Table 3).

Table 6: Share of subsidies in farms' income

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total net farm incomes (with subsidies)	29	39	53	108	106	94	119	142	208	132
Net incomes from livestock production	37	21	34	85	80	53	69	88	128	104
Net incomes from crop production	-7	18	19	22	25	41	49	54	81	29
Total subsidies	20	26	37	56	100	112	135	138	138	177
Total net farm incomes (without subsidies)	9	14	16	51	6	-18	-16	4	70	-45

Source: Agricistrade.eu

#### 2.1.2 Fertile Soils

Soils are one of the most valuable natural resource that Russia holds and which can be used by foreigners to get high yields. Fertility and yield are the core factors of economic development and economic use of a large number of different regions of Russia. The type of soils, which Russia is known for is called the "Mollisols", another more common name is "Black Earth" (in Russian- "Chernozyom"). Mollisols are described as "prairie or grassland soils that have a dark-coloured surface horizon. They are highly fertile and rich in chemical "bases" such as calcium and magnesium" (United States Department of Agriculture, 2005). The dark surface horizon comes from the yearly addition of organic matter to the soils from the deep roots of prairie plants. Mollisols are quite rare and cover only 7 per cent of the inland surface. Of the world's reserves, 48 per cent of Mollisols are owned by Russia. "Black Earth" is famous not only for its phenomenal fertility: an equally important advantage of this type of soils is its stability as a soil ecosystem. If used properly in favourable conditions, that type of soils can be re-used for decades without visible signs of depletion. Recultivation is relatively quick and inexpensive (United States Department of Agriculture, 2005).

#### 2.1.3 Cheap factors of production: land and labor

Decision on establishment of new operating units in another country can be pushed by the cost-cutting of the production factors. The agricultural sector in Russia hides another strategic strength for investors: very cheap land and labor. The official data on cost of land for agricultural complexes and farms is not available mainly because the land plots are fixed in the form of private ownership. However, news portals state that the price of land in Russia has been the cheapest in comparison to other developed countries- 445 USD per acre (app. 1090 USD per hectare) on the 19<sup>th</sup> January 2016. Since then, prices have increased by 30-80 percent depending on the region, but still remained cheap (Vedomosti,

2017). For instance, one of the offers from the EuroFarms website states the price of the land for 1000 USD per hectare (ha). This offer is coming from Tver, which is situated in the Central Region. As already been highlighted in the previous chapter, Central Region is the most productive region in Russia. Another offer is origination from Oryol- one of the districts with highly fertile land- approximately 700 USD per acre (app.1500 USD/ha) with already available crop farming facilities and developed infrastructure. In comparison, the official data obtained from the United States Department of Agriculture highlights that the price for land in 2017 in the USA was 3080 USD per acre (app. 6300 USD/ha) (USDA, 2017). To have a broader picture, I would like to compare the land prices in Russia to those in France and Czech Republic. France is known as the biggest recipient of subsidies from CAP (Common Agricultural Policy), while Czech Republic is chosen for the comparison randomly. The cheapest arable land in Czech Republic is available in "Střední Morava" district and will cost 2689 EUR (3309 USD) per hectare. In France, the cheapest arable land costs 3030 EUR (3728 USD) per hectare (European Commission, 2016).

In 2017 the Ministry of Labor of Russia claimed that the lowest salaries were payed in the agricultural sector. The average salary in agriculture in 2017 was only 20000 RUB (FSSS data for 2015: 19721 RUB). If we compare the data to the one obtained from Czech Republic, the difference is striking. In 2016 the average salary in agriculture in Czech Republic was 21478 CZK, or approximately 60000 RUB (SVATOŠ et.al, 2018). This could be explained by the low level of agricultural education, insufficient number of agricultural universities, shortage of specialists and lack of population interest in agricultural activities.

#### 2.2: Weaknesses

#### 2.2.1: Land ownership

Returning to the previously discussed matter, it is vital to focus on the existing laws of land ownership. According to the Federal Law №101-FZ, "…foreign citizens, as well as Russian legal entities with more than 50 percent share of foreigners in their charter (joint-stock) capital, may possess land plots of the lands of agricultural destination only under the leasehold right". If a foreign investor plans to own land for agricultural purposes, he can only do so by signing the lease contract, which is concluded for the term of three to forty nine years. For haymaking and grazing, the lease contract for a land plot from agricultural land in state or municipal ownership is concluded only for a period of up to three years.

Even though the process of concluding a lease contract may not necessarily hinder the process of investment, coupled with bureaucracy and corruption, it may take extra time and money to conclude. Data gathered by the Transparency International (2017), indicates that corruption perception index for 2016 in Russia was high- 131, no advancement shown in comparison to 2015. The foregoing discussion implies that, without hiring a lawyer or an agent, it is timely and costly to conduct a lease contract in Russia.

Research on the current state of the Land Code and laws regulating the land usage, supports the view that land, as one of the production factors, is the most difficult to obtain, even though the price of it is low. What might change the investors opinion is the further assumption that the land reform will not change the situation in favor of people. The belief is that as land is a big source of revenue, the agricultural lobby will not support the land privatization, or will apply restrictions on the participation in land privatization for the foreign entities and investors (The Economist, 2017).

#### 2.2.2: Infrastructure

State Program for Development of Agriculture 2013-20 is aimed partly on the development of infrastructure of agro-food market. As more investors are expected to be operating in agricultural sector in Russia, well-developed infrastructure is one of the core factors of success. Goods need to be transported quickly to the consumers, especially if we are talking about goods with short expiration time, for instance dairy products, poultry and greenhouse fruits and vegetables. Global Competitiveness Report identifies that infrastructure in Russia is one of the most developed pillars, however the rate of development varies: quality of roads ranked poorly- 123 out of 140, while railroads are developed much better- ranked 24 out of 140. This fact brings more concerns for investment decision-making if we observe amount of funds invested in infrastructure development: Russia has sharply decreased investment into roads improvement: from 9,8 billion EUR in 2013 to 6,1 billion EUR in 2015 (Organisation for Economic Co-operation and Development, 2018).

What is more, the table below illustrates that the development of infrastructure in Russia is legging behind, in comparison to EU-28, USA and China. While Russia is the 1<sup>st</sup> country by area, it has the least developed road and railway network: only 1,15 million and 0,086 million kilometers respectively, which is 3 times less than in EU-28 or in the USA.

Table 7: Transport infrastructure, Comparison EU-28- World

	TRANSPORT INFRASTRUCTURE							
	EU-28	USA	JAPAN	CHINA	RUSSIA			
1 000 km	2015	2015	2014	2015	2015			
Road network (paved)	5000	4402	993	4 0 4 6	1154			
Motorway network	<i>75.8</i>	102.2 (1)	8.4 (2)	104.4	52.0 (³)			
Railway network	218.2	203.2 (4)	19.2	121.0	86.0			
Electrified rail lines	116.1		11.5	74.7	43.5			
Navigable inland waterways	41.9	40.2		127.0	102.0			
Oil pipelines	36.0	335.7		108.7 (5)	55.0 ( <sup>6</sup> )			

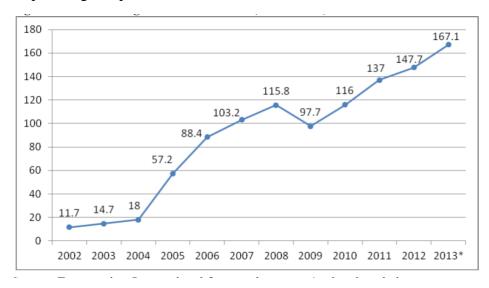
Source: European Commission, 2017

#### 2.3: Opportunities

#### 2.3.1: Organic food market

Producers of organic products can take advantage of the particularly empty market for the "greener" (organic, bio, green-labeled) foods in Russia. Meanwhile, consumers' preferences are developing towards the higher demand for organic food. Currently, most organic products in Russia are imported from the EU countries such as Germany, France and Italy, and positioned as premium or super-premium. They are sold in specialized stores in areas where upper-income people live, as well as other premium retail chain outlets, for instance, Azbuka Vkusa (WorldFood, 2016). In Russia organic goods are typically 20 to 400 percent more expensive than their conventional equivalents and they account for 2-7 percent of supermarket sales. Experts point out that it is unlikely that domestic organic production will kick-off in the near future, because of the low interest in organic farming in Russian regions with favourable conditions for it, poor social advertising which results in misunderstanding of the basics of organic farming by agro-enterprises, and lack of governmental support to organic farmers. This means that foreign investors already producing organic food have an opportunity to be the pioneers in production of highquality organic products, many of which are yet to be sold in Russia, or using new agricultural methods.

Even though the market is dominated by the imported products, it is developing rapidly: Russia's organic food market has displayed the double growth over the past ten years: starting at the point off 115 million USD in 2007 and expected to reach 250 million USD in 2017 (Graph 3). Meanwhile, today approximately 3 percent of Russians (4,3 million people) regularly choose organic when buying food. Changing consumer preferences in favour of healthy eating and choosing high quality natural products, support the development of the organic food market: people desire healthier foods, switching from being price sensitive consumers to paying more attention to what they consume. The recent research conducted by Passport (2017) outlined the leading consumers types in Russia, which are: Inspired Adventurer (26%), Empowered Activist (21%), Conservative Homebody (20%), Secure Traditionalist (19%) and Undaunted Striver (14%). The same report affirms that companies with organic products should actively target Undaunted Strivers and Empowered Activists as these consumer types are most likely to trust green labels, spend money on green product features. These two types of consumers are represented by 35 percent of population from which companies can benefit.



Graph 3:Organic products sales, Russia, Million USD

Source: Kolchevnikova, 2013

#### 2.3.2: Record yields

The main export commodity and source of revenue from international trade for Russia is known to be the energy products. Dependence on trade in oil and gas is considered as a potential threat and time bomb for the country in the future, considering the current trend

towards the reduction of use of hydrocarbon fuels. However, Russia is expected to be benefiting as the future leading wheat exporter and a grain producer. Alexander Tkachuov, the Minister of agriculture of Russia, has repeatedly stated that he expects grains to eventually replace oil as the country's biggest export revenue source (Bershidsky, 2017). The results for 2017 are forecasted to be striking- around 130 million tons of grains to be produced (Lyddon, 2017). The International Grains Council (2017) forecasts the total grains production in 2017/2018 year to be even higher- 140 million tons of grains. Comparing this to the figure form 2015- 109 million tons of grains produced- the advancement is noticeable. Meanwhile, the export of grains is expected to follow the trend: Russia is supposed to be the second largest exporter of grains in 2018, reaching the peak of 44,1 million tons exported (International Grains Council, 2017).

Table 8: Total grains export, mln. tons

	2015/2016	2016/2017	2017/2018
EU-28	51,6	39,1	38,4
USA	78,7	93,8	81,4
Russia	34,8	36,5	44,1

Source: International Grains Council, 2017

As for the wheat production, future investors should monitor the situation in Russia with a more precise look. The opportunity lies in the fact, that the EU's export of wheat dropped 25 percent in 2017. The number is expected to recover slightly, however, at the same time Russian wheat exports rose up by a fifth in 2017, keeping in mind, that the estimates for 2018 are even higher (Jha, 2017). Russia is challenging the established European suppliers, because of the low costs of production and transportation, while Europe is struggling with one problem- grains surplus. Meanwhile, as the wheat output in Russia rocketed in recent years, which, coupled with low oil prices "hurting" the ruble is making wheat cheaper for the overseas buyers, it allowed the country to grab a market share from core exporters to Asia- United States and Canada. Moreover, the short shipping routes from the Black Sea to Middle Eastern and African buyers, opens the way for the new export destination (Medetsky, 2018). The Institute for Agricultural Market Studies, known as IKAR, proposed that Russia has an opportunity to send more wheat to Indonesia, Vietnam and the Philippines in 2018 (Medetsky & Jha, 2017).

Table 9: Total export of wheat, mln.tons

	2015/2016	2016/2017	2017/2018
EU-28	35,1	27,8	26,4
USA	21,1	28,7	26,5
Russia	25,5	27,8	34,6

Source: International Grains Council, 2017

In addition to that, according to FAOSTAT (2017), while production of wheat has been growing steadily since 2012, reaching the highest peak of 73,29 million tons produced, the harvested area under wheat has been growing too, reaching its peak in 2016 of 27,3 million hectares harvested. The positive trend in arable land area and production of grains, wheat and sugar beet, coupled with decreasing power of the EU and the US on the wheat market, may in several years lead Russia to establish the leading position as the producer and exporter of agricultural commodities. This means that Russia might exercise some power over the world price of agricultural commodities.

#### 2.4: Threats

#### 2.4.1: Grain export tax

In 2015 the Government of Russia introduced the grain export duty, which was 15 percent of the custom value plus 7.5 EUR. This was the second time Russia has introduced restrictions on export: previously the Government of Russia has restricted the export of core agricultural commodities in 2010 after the record small yield and fires, which destroyed farms in Central and Southern regions. Although Russia has restrictions on repeating the export ban in accordance with the WTO rules, which the country entered in 2012, the officials do not exclude the use of such measures in future. Currently, the following export duty has been cut to promote the higher exportation of crops (but hasn't been canceled yet), however, future investors should be prepared for the unexpected export-restricting measures in case of rubble devaluation.

### Chapter 3: Energy sector description

#### 3.1: Background

First documented oil exploration in Russia dates back to the late 19th century. When Russia entered the world oil market, it damaged the Standard Oil's position as one of the major explorer and trader in oil in the 1870s. Soviet dumping of cheap oil and desire for the hard currency earnings from oil exports in the 1960s pushed Soviet Union to increase the export of oil. The arrival of cheap Soviet barrels on the oil market forced Western oil companies to cut their posted prices for Middle Eastern oil, therefore reducing royalty revenues for governments of the Middle East. This is believed to be one of the reasons which pushed the formation of the Organization of Petroleum Exporting Countries (OPEC). However, already in 1977 the first production decline hit the country, caused by the insufficient investment in technology and refineries. The second hit happened in the period between 1982 and 1986, but Moscow managed to stabilize the situation by injecting cash. Wasteful exploration and extraction in 1980s and 1990s depleted the oil reserves. Russian technology was not capable of exploring and extracting as deeply and efficiently as Western technology. These disadvantages played a major role in Russia's decreasing oil production during the 1980s and 90s (Gerber, 2014). Following the collapse of the Soviet Union in 1991, oil industry was privatized. Starting in the late 1990s, privately-owned companies developed growth in the sector, while a number of international oil companies attempted to enter the Russian market. More recently, the Russian oil industry has consolidated into fewer firms with more state control and vertically integrated oil companies (VIOCs).

An important stage in the development of the Russian gas industry was the beginning of exploitation of the Urengoi-Pomary-Uzhgorod gas pipeline in 1983 to deliver natural gas from the fields of Western Siberia to the central regions of the USSR and to the Central and Western Europe. Following that, a new stage of the accelerated development of the gas industry and the Unified Gas Supply System (UGSS) came, characterized by the creation of long-distance and ultra-long gas pipelines. For transportation of gas almost a hundred thousand kilometres of main pipelines were built, which laid the foundation of the modern UGSS of Russia. By the end of the 1980s, the UGSS acquired a modern look, becoming the world's largest gas supply system, providing over 40% of the USSR's fuel needs, a significant share of fuel consumption in Eastern Europe and many Western European

countries (Kovalev, 2008). Today, the development of the energy sector is governed by the Energy Strategy 2020 and a succession Energy Strategy 2030. Approved by the Government of the Russian Federation in 2003, the Energy Strategy of Russia for the period until 2020 became the first official strategic document of a national scale in the new century (U.S. Energy Information Administration, 2017). The unchanged goal of Russia's energy policy is to maximize the efficient use of natural energy resources and the entire potential of the energy sector for sustainable economic growth and quality of life of the country's population and to help strengthen its foreign economic positions.

#### 3.2: Economic Indicators

The importance of oil and gas industry cannot be underestimated: as the most traded commodities, oil and gas exports bring a huge revenue to the state budget, as well as helping to keep the trade balance positive (exported 282 bill. USD and imported 180 bill. USD) (OEC,2017). To estimate the contribution of the two sectors to the GDP might be challenging due to the limited statistics available. However, in 2016 the industrial sector of the economy, which also includes the production, mining, transporting and trade in oil and gas, contributed only 32.42 percent to the GDP in Russia (Table 11 in Annexes), declining from 37.23 percent in 2006. The overall trend has been fluctuating in the recent years, which can be explained by the increasing share of services contribution to the GDP and the significant drop of commodity prices in 2015. The actual value (Table 1 in Chapter 1.2) has been higher than of those of agricultural and financial activities, but still lower than of services (real estate, commerce) and manufacturing. As for the employment in the sectors, repeatedly, it is challenging to estimate. The Federal State Statistics Service (2017), indicates the three main activities which are related to the energy sector: mining, production and distribution of electricity, gas and water and manufacturing of fossils. Altogether these three groups represent 19,8 percent of the total number of those employed in Russia. However, not all of the professions in these groups are closely related to the oil and gas industry, meaning that the number is not exact. Meanwhile, the majority of those employed by the gas and oil companies are providing the supporting services related to the export and import of fuels.

The structure of the federal budget of the Russian Federation illustrates the dependence and importance of the oil and gas industry: a sharp decline of oil prices in 2015 led to the decrease in Russian federal budget revenue by 850 billion RUB. The growth of incomes

not related to oil and gas industry grew thanks to VAT (because of a higher inflation rate) and receipts from public assets, because at the time when Russian currency devaluated, as a result foreign assets grew in rubble terms.

16
14
12
10
8
6
4
2
0
2014
2015

Total Budget income oil and gas incomes

Chart 1:Structure of Russian federal budget

Source: Analytical Center for the Government of the Russian Federation, 2016

#### 3.3 Production

Russia holds the world's largest gas reserves and is the world's second gas producer after the United States, as well as the world's largest producer of crude oil (including lease condensate). The production of oil has been growing steadily over the past decade, reaching its peak in 2016 with 11,227 million barrels produced daily, showing a growth of 2,2 percent in comparison with the previous year. The proved reserves at the end of 2015 were at the point of 109,5 thousand million barrels. Moreover, at the end of 2016 Russia held the second largest natural gas proved reserves of 1139 trillion cubic feet. The production of natural gas has slightly decreased in 2014 but saw an increase of 0,5 percent in 2016 with 55,9 billion cubic feet per day produced. (BP, 2017)

Table 10: Production of oil (in mln.barrels/day) and natural gas (in bill.cubic feet/day), 2008-2016

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Oil	9951	10140	10367	10519	10642	10780	10838	10981	11227
Gas	58,1	51,1	57,0	58,7	57,1	58,5	56,3	55,6	55,9

Source: BP, 2017

#### 3.4: Main regions of production

The core oil-producing regions of Russia are: Western Siberia, Urals-Volga, Krasnoyarsk and Sakhalin (Table 16 in Annexes). Previously, the bulk of domestic oil production accounted for the Volga-Ural basin, however, most recently, the majority of raw materials are mined in Western and Eastern Siberia. The largest volumes of oil production are in the Khanty-Mansiysk Autonomous District - these are the Samotlor, Priobskoye, Lyantorskoye and other deposits in the region. Only recently the production of oil in West Siberia has replaced the most mature and productive fields in Ural District. Crude oil production in Ural Federal District continues to decrease (by 0.4 MTT in 2016) but it still provides 56 percent of the total Russian crude oil production. Yamalo-Nenets Autonomous District (YNAD) is another region with high concentration of oil resources (Deryagin, 2015). The territory of the exploitation of energy resources, located in West Siberia, is the largest oil and gas province in Russia: its share in the initial total reserves of Russia's natural resources is 60 percent. About 500 oil, oil and gas condensate and oil and gas fields have been discovered in this region, which represent 73 percent of all the Russian oil reserves currently explored. Since the opening of the territory for exploitation, almost 6 billion tons of crude oil, or 45 percent of the total crude oil production in Russia, were produced in West Siberia. In this region 273 oil fields have been discovered, 120 of which are being actively developed. However, years of intensive exploitation of these deposits (including the largest oil field in Russia – Samotlor (reserves are estimated at 7.1 billion metric tones of hydrocarbon) led to the depletion of selected fields.

West Siberia, and in particular Nadym-Pur-Taz in Yamalo-Nenets Autonomous District (YNAD) are Russia's key gas producing regions. Yamal peninsula holds 27% of gas reserves in Russia (11 trillion cubic meters). In Yamal peninsula, Gazprom's giant Bovanenkovo gas field with estimated reserves of 4.9 tcm of gas started operating in October 2012. It is aimed at offsetting declining production in the traditional gas production areas (Urengoy, Yamburg, Medvezhe) (IEA, 2014). Recently the sector is undergoing major changes in the centre of gravity of production: traditional West Siberian fields (Urengoy, Yamburg, Medvezhe) will be replaced by Nadym-Pur-Taz, East Siberia, Far East and Gydan peninsula. The reason for the shift is the forecasted decline in production in the traditional regions: by 75 percent until 2030 (IEA, 2014). The Eastern Gas Program currently aims attention at developing the integrated system of export of gas

to the potential consumers at the Asia-Pacific region, which will most probably run thru East Siberia and the Far East. The Sakhalin region is forecasted to increase its production as well.

#### 3.5: Consumption

Overall, the strong consumption growth on the Asian market coupled with a sharp decrease of oil prices in 2015, led to the increase of the global demand for oil by 2 percent, while the consumption in developing countries grew by 2,3 percent.

In Russia oil consumption trend has undergone changes since 1990's: the total consumption of oil amounted to 148 MMT in 2016, with the major consuming sectors being the industry and transport: with 70 MMT and 80 MMT consumed respectively. Commercial airports consume three quarters of the jet fuel and the main Moscow commercial airports represent a half of the Russian market. Moreover, given a growing middle and upper-middle class in Russia, about 3 million cars are sold at the Russian market each year, while the number is expected to grow steadily till the year 2020 (IEA, 2014). If the car usage habits remain unchanged and the disposable income of population will not decline, then the consumption of gasoline is expected to increase further. Power generation and transformations today consume only 20 MMT (million metric tons) of oil, while in the year 1990 consumption for these activities amounted to 70 MMT. Finally, consumption by the residents represent the smallest fraction- around 5 MMT.

Russia is the second largest consumer of the natural gas in the world. In 2016 the total consumption in Russian amounted to 423 bcm and represented 70 percent of the total CIS consumption. The peak of consumption was in 2013 (483 bcm), but since then declined sharply and is now equal to the index of the year 2004 (422 bcm). This decline might be explained by the innovative development of the industrial sector and a steady switch from the conventional gas and oil towards the unconventional sources. The overall trend has been increasing since 2000s (Enerdata, 2016).

In the governmental program Energy Strategy to 2030, the Government of Russia forecasted a sharp increase for the gas demand- by 280 bcm by 2020 and would be in a range of 712 bcm to 743 bcm by the year 2020 (IEA, 2014). Yet, calculations done by the Energy Research Institute of the Russian Academy of Sciences illustrate that the increase

would rather be modest: only by 40 bcm by the year 2020. The major consumers of gas in Russia are the power generating industry and the industrial sector as a whole. To supply the Russian power and electricity plants in 2014 around 40 percent of the total gas production was provided- 190 bcm. IEA projections envisage a flat demand from the power sector until 2030. Following that, the heating plants consume 14 percent of Russian gas, or 67 bcm. The industrial sector, represented mainly by chemical and metallurgy industry, consume 13 percent of the total demand- 62 bcm. Consumption by the residents represent 10 percent, followed by "technological needs" and "losses in pipelines" categories.

#### 3.6: Business Environment

#### 3.6.1: Institutions

To understand the process and complexity of the business environment in the energy sector in Russia, it is vital to recognize all the institutions involved in the sector. First of all, the Constitution of the Russian Federation mentions that the President of Russia, as the highest political decision maker, is also responsible for making the primary diplomatic decisions and announcing major policies in the oil and gas industries. All the major contracts conducted with the state companies, or between the states involving the supply of the energy, are supervised by the presidents' administration. Moreover, it is the Prime Minister's duty to develop and oversee the implementation of the energy policy, and he is supported by the deputy prime ministers of the energy sector. Secondly, as well as overseeing the Federal Grid Company's (Federal Grid Company of Unified Energy System) investment projects, the Ministry of Energy of Russia introduces and carries out policies in energy sector, which include energy efficiency, coal industry, power generation and renewables, LNG and hard-to-recover resource. Moreover, Russian Energy Agency (REA) under the Ministry of Energy assists the implementation of the state program Energy Strategy 2020 and Energy Strategy 2035. (IEA, 2014)

Finally, to demonstrate the complexity of the sector, it is vital to illustrate another policy-making institution- Presidential Commission for Strategic Development of the Fuel and Energy Sector and Environmental Safety. It is represented by the ministers, representatives and CEOs of the core companies involved in exploitation, development and supply of energy. This Commission is functioning as the co-ordinator of the main policies with the primary focus on the projects aimed at supplying strategic partners.

#### 3.6.2: Energy Policy

Currently, the development of the energy sector is governed by the Energy Strategy 2020. The program is aimed at strengthening the energy supply security, increasing the role of Russian companies as the global energy suppliers and ensuring the uninterrupted and affordable energy supply of domestic and foreign markets. The Energy Strategy 2030 has been recently replaced by the projected Energy Strategy 2035, which has not been yet confirmed, but the project is already available. The new program will also focus on the geographical diversification of export, investment attraction from abroad, competitiveness improvement of oil and gas companies and technological development of the sector. (Ministry of Energy, 2014)

#### 3.6.3: Core operating companies

Gazprom is the largest gas company in the world by the volume of the held reserves: it holds 35,7 trillion cubic metres of gas, while the second biggest company Saudi Aramco holds only 8,1 trillion cubic metres (Deloitte Reports, 2014). In Russia 71,3 percent of the total gas production (487 bcm in 2013) accounts for Gazprom, while 5 other types of companies are holding other 29 percent of production. The Government of Russia controls over 50 percent of Gazprom, which automatically makes it the state-owned company. Other major producers of gas in Russia are: Novatek (53bcm), Rosneft (30bcm), Lukoil (18,2 bcm), Surgutneftegas (12,1 bcm) and Gazprom Neft (11,4 bcm). Interesting to note, that Gazprom continues to be the owner of the Gas Transportation System (GTS) and thus plays the major influence on the process of gas transportation. However, by the Federal Law on Gas Supply in the Russian Federation, which sets the terms and conditions for granting access to transmission capacity of the GTS, Gazprom has been required to grant access to other gas companies to its pipelines under the transmission contract. This ended the dominant position of Gazprom, still, some of the companies complain about the time and costs of concluding such a contract, and currently the Federal Anti-Monopoly Service (FAS) oversees a number of cases when Gazprom did not offer access to its pipelines, prioritising its own supplies.

In the oil sector Rosneft, Lukoil, Surgutneftegaz and Gazprom Oil produce about 71 percent of the total output. In the early 2000s there existed private oil producers such as Yukos, Sibneft, Lukoil and Surgutneftegaz, which helped to increase oil production; since

the mid-2000s, there has been a trend of a growing concentration of oil production through state-controlled companies, such as Rosneft and Gazprom Neft, while only two major private companies remained at the end of 2013: Lukoil and Surgutneftegaz. Altogether, production of oil in Russia in 2012 was carried out by 301 companies, including: "124 companies and organisations within the structure of the eight vertically integrated oil companies (VIOCs), 174 independent companies, representing 12% of total production in 2012, of which the largest producer is by far Tomskneft, and three consortia working under three PSAs – Sakhalin-1, Sakhalin-2 and Kharyaga." (IEA, 139:2014).

#### 3.6.4: Laws on investment

Foreign investment into the energy sector in Russia is not governed by any specific laws, however, the restrictions on the investment into the strategic sub-oil bases are to be found in the Federal Law № 57-FZ "On the Procedure of Making Foreign Investments in Companies of Strategic Importance for National Defence and State Security". Another limitation is present in the limit of control a foreign entity can acquire: laws do not restrict the share a foreigner investor can get, however, in practice it is not possible to control more than 50 percent of the Russian entity in the energy sector. Currently, Russian legislation provides for the investment of capital in the exploration, production and processing of hydrocarbons by both national and foreign investors. Mechanisms of "supllying" foreign capital into the Russian gas and oil markets are as follows: the entry of foreign capital on the terms of the production sharing agreement (PSA). For Instance, Sakhalin-1. Second option is the creation of joint ventures (JVs): Salym Petroleum Development (Shell – 50%, SibirEnergy – 50%). Thirdly, participation of a foreign investor as a contractor or executor of service contract: Schlumberger, Halliburton. Finally, the purchase by a foreign investor of a stake in a Russian oil and gas company (vertically integrated, VIOCs): Unipro (83,73% of the company is owned by the German energy company Uniper) (Goltelova, 2014).

#### 3.7: Trade

The structure of import into Russia is demonstrated in Table 15 in Annexes section and is dominated mainly by the chemical products, which represent 13 percent of the total imports, foodstuff and agricultural raw materials. The value of the imported mineral products in 2016 was 1,3 billion USD (OEC, 2017), which represented only 1,7 percent of

the total value of import. Notably, both export and import of fuels and mining products in Russia declined in the last 5 years: import of fuels declined from 10,974 billion USD to 5,627 billion USD, while export fell dramatically from 372,9 to 177 billion USD.

In 2016 the total value of export from Russia was 282 billion USD, out of which 138 billion USD (or 48 percent) were represented by the mineral products. The most exported commodity is Crude Petroleum, which represents 26,1 percent of the total exports of Russia. The main exportation destinations for the Crude Petroleum from Russia are China (20 percent), Netherlands (19 percent) and Germany (9,3 percent) (OEC, 2017).

The export of natural gas is more problematic: legislation describes Gazprom as the holder of the exclusive right to natural gas exportation from Russia. That means that if a foreign investor is interested in the export of natural gas, then another option should be considered-Liquefied Natural Gas (LNG). Here Gazprom does not hold any exclusive rights since 2013 (Deloitte Reports, 2014). The core export destinations for LNG in 2016 were: Japan (52 percent) and South Korea (17 percent) and the total value totaled to 3,91 billion USD (OEC, 2017).

### Chapter 4: SWOT Analysis for the Energy Sector

#### 4.1: Strengths

#### 4.1.1: Advanced infrastructure

One of the core strengths of the oil and gas industries within the energy sector in Russia is the existing and constantly upgrading transportation infrastructure for oil and gas. Apart from supplying domestic market, the objective behind further expansion of infrastructure is to cover broader territories and progress export possibilities. Foreign investors can be confident regarding the capacity and reliability of infrastructure, supplying both foreign and domestic markets.

Starting with the gas industry, Unified Gas Supply System (UGSS) is the "production and technology complex consisting of production, transmission, procession and underground gas storage facilities and distribution facilities in European Russia and Western Siberia" (Gazprom, 2015). This world's largest gas transmission system is owned by Gazprom and represents a unique complex which assures continuous gas supply. The length of the system, which is also called the Gas Transmission System (GTS), totals to 171,4 thousand kilometres and includes 253 compressor stations. Independent companies are provided with non-discriminatory access. New facilities are being built to improve the reliability of gas supply, boost gasification and gas distribution across Russian regions as well as export destinations: between 2012 and 2016 Gazprom commissioned around 6,900 thousand kilometers of gas mains in Russia (Map 1 in Annexes).

Oil infrastructure is also well-developed and modernized reflecting the geography of the export of oil: changed dramatically due to the growing role of the Asian region as one of the main future consumer of Russian oil products. Over the past 15 years, the export of crude petroleum to the region has rocketed to 14,8 billion USD in 2016, representing 20 percent of the total value of export (OEC, 2017). The growth and security of supply is further ensured by the development of new pipelines routes and ports in Eastern Russia. The Eastern Siberia-Pacific Ocean (ESPO) pipeline was launched in 2009 and now stabilizes transportation to China thru the Amur Region, Western and Easter Siberia. Later, the pipeline was extended to the port of Kozmino in the Far East, which allowed oil exports to other countries of the Asia-Pacific region. Kozimo port represents a significant role as one of the most fast-developing and significant ports which in 2015 provided for

the transshipment of 30.4 million tons of oil, which is twice as high as in 2011 and is 13 percent of the national figure (Analytical Center for the Government of the Russian Federation, 2016). Notably, the geographical position of Russia also contributes to the export advantage: sea access and port infrastructure made it possible to export around 60 percent of products via marine transport. In future the development of infrastructure may provide access to new export markets.

#### 4.1.2: Labor force

Referring to the Chapter 2, average salaries in agriculture in various countries were compared and the results indicated the low price of labor in Russia. A serious weakness with this argument, however, is that the price of labor may reflect the "quality", meaning that there is a limited number of specialists in the sphere. This, however, is not the case with the energy sector. The average salary for the "extraction of fuel and energy minerals" as reported by the Federal State Statistics Service (2017) in 2016 was 71400 RUB. The development was rapid starting with only 23400 RUB in 2005. Higher salaries reflect higher qualification of workers: Russia provides higher education in the sphere of oil and gas-related activities. There are several universities which focus primarily on those activities, the most crucial ones are: Siberian Research Institute of Petroleum Industry, Gubkin Russian State University of Oil and Gas, Saint Petersburg Mining Institute and Tyumen State Oil and Gas University. Universities are supported with finance from the state, continuous exhibitions and job fairs.

### 4.2: Weaknesses

## 4.2.1: Taxation

Taxation system applied to the extraction and export of oil products is one of the major drawbacks for the future investors. Core tax systems applied here are the Mineral Extraction Tax (MET) and export tax. The complication lies in the lack of transparency of these tax laws. For instance, MET applies to the volume of liquid oil being extracted and represents "about 20 percent of the value of oil on the basis of a USD 100/bbl oil price" (IEA, 2014: 145). However, the formula for calculation of MET is complicated and relies greatly upon the tax base and price for the Urals oil. The base has been steadily increasing every year and totaled to 559 RUB per ton in 2016. Unfortunately, the harmonization of the MET tax system is yet to come and should not be expected until 2020, because of the

speculations around the MET tax increase in order to give tax breaks to companies developing hard-to-recover resources. Dependence on the Urals oil price likewise hinders the ability to calculate tax or to evaluate expenses adequately. Besides, here tax breaks and tax holidays are only available for hard-to-recover resources.

Moreover, about 50 percent of crude oil value is represented by the export tax. Investors wishing to acquire shares at Gazprom can investigate the documents regarding taxation of Gazprom, where the fee for exporting oil is stated at 120 USD per tone, at the same time the duty for export of natural gas is 30 percent.

#### 4.2.2: Economic Sanctions

This disadvantage represents a direct threat for the foreign investors. First of all, foreign investing companies originating from the EU or USA, would probably be advised to suspend from investing into Russian oil and gas corporations. The CEOs of the most influencing companies, for instance Transneft, Surgutneftegaz, Gazprom and Gazprom Oil, have already been added into the US sanctions list against Russia, and the list is being further updated. As the Government of the Russian Federation owns both Transneft and Gazprom, that brings me to the conclusion that some business partners would like to stop financing or investing into new projects prepared by these companies, because of the existing tensions between Russia and Western countries, in particular with the United States of America.

The sanctions list restricts American investors to finance joint energy projects in which Russian investors or companies own more than 33 percent share (Interfax, 2017). Besides, the Congress is opposed to the development of the Nord Stream 2 project, stating that it can damage the competition on the European market, while in Russia Nord Stream 2 is currently considered as the biggest and most prosperous gas-transporting project so far. That is to say that investors from the USA can experience legal actions taken against them for investing in energy projects and companies.

Moreover, for other investors, including the CEOs of core energy companies into the sanctions list indicates that it would be challenging for Russian companies to take credit in the foreign countries. Without being able to borrow money from the Western banks,

Russian energy companies may in the future loose technological advantage or be unable to advance or replace old refinery stations, as well as to develop new projects. The sanctions list also prohibits supply of technologies and services required for the construction of pipelines. Restrictions apply to certain cases where a single item costs more than 1 million USD, or more than 5 million USD have been delivered over the past year.

## 4.3 Opportunities

## 4.3.1: Unconventional gas and oil

My personal view on the future of energy is that as the main regions will run short off oil and gas, unconventional sources will come to its replacement. Unconventional oil sources are oil shales and oil sands, while unconventional gas is represented mainly by shale gas. Nevertheless, unconventional oil has not been developed yet by Russian oil companies, Russian potential resources of shell gas, in contrast, have already threatened the position of OPEC countries (Rapoza, 2017).

The problem lies in the fact that Russia currently takes the 9<sup>th</sup> position in the world by the recoverable shale gas resources, but it is too costly for the country to extract and develop those resources, as unfortunately the priority of the State programs is the development and exportation of traditional gas and oil sources. A major role in future will play the Bazhenov formation, as it is estimated to have "hydrocarbons around 98 feet deep and is larger than the Bakken in the Dakotas and Eagle Ford in Texas combined" (Rapoza, 2017). This formation has another "treasure": potentially, "Bazhenov can contain from 600 million to 174 billion tons of light crude, which is even larger than the total initial geological reserves of light oil in all known oil and gas provinces of Russia" (IEA, 2014: 112).

Of course, such an opportunity has been noticed by Exxon company which wanted to provide assistance to Russia in extracting these resources, but sanctions have postponed the project. Future investors must understand that it is believed in Russia that extracting these sources will be too costly and so companies decide not to finance or develop these projects. Still, Gazprom has already started a trial development of coalbed methane resources in 2010 and unconventional gas production in Russia exists today, but only at the negligible level – 4 billion cubic meters per year. These projects can be developed and invested in to expand further or even develop uninterrupted supply to domestic market, and

foreign investors with a long-term vision may find it profitable to support the extraction of sources on which we will rely in the future.

### 4.3.2: Openness to partnership

The EU and US sanctions have banned credits to some of the largest banks, companies and projects in Russia. As already been said, it is challenging to get credit. However, this can be potentially good news for investors. I hold the view that Russia will be willing to sell stakes of the major oil and gas companies held by the Government at a lower price, due to insufficient investment and financing. Money is a valuable resource of which the energy sector may run short, while new projects and pipelines to potential destinations require funds. Consequently, to raise funds, Russian energy companies may be more open to new deals and partnerships. One notable example is Chinese buyout of 14,16 percent (9,1 billion USD) of Rosneft by CEFC China Energy in September 2017. This is particularly interesting keeping in mind that Russia is known to be hard to do business with in oil industry. Without a doubt it signalizes that Russian assets are becoming cheaper and companies are looking for investors. What is more, if sanctions are still in place, government may introduce new investment incentives and even tax cuts to attract investors from abroad.

### 4.3.3: New projects to attract finance

Investment into the Energy sector can be made in the form of investment into the projects directly, other than acquiring shares in one of the companies. The most recent and prosperous projects can be the Nord Stream 2 and TurkStream. Nord Stream 2 is an export pipelines infrastructure running from Russian to Europe through the Baltic sea. This particular project is believed to increase the position of Russia in European gas markets: in 2016 Russia supplied 34 percent of EU natural gas consumption, and Nord Stream 2 could double Nord Stream 1's export capacity (Saravalle, 2017). Some argued Nord Stream 2 would increase Russia's share of the German gas market and even create a monopoly there, already supplying 43 percent of the market in 2015. Becoming one of the leading suppliers of gas to Europe would mean higher profit for the company and as a result higher rate of return for investors. TurkStream, meanwhile, will substantially enhance the reliability of gas supply to Turkey, southern and southeastern Europe.

Picture 2: TurkStream gas pipeline route



Source: Gazprom, 2017

### 4.3.4: LNG (Liquefied Natural Gas) trade

Not being able to export natural gas because of the monopoly of Gazprom can hinder investors decision. Generally, the LNG trade does not appear to be heard on the news or anywhere else, but it is another prosperous source of energy. According to the recent report on LNG trade by the International Gas Union, "for the third consecutive year, global LNG trade set a new record, reaching 258 million tons (MT) and this marks an increase of 13.1 MT (+5%) from 2015, when a previous record of 244.8 MT was set over the 2014 trade volume of 241.1 MT" (International Gas Union, 2017: 4). With the increasing LNG trade, position of Russian independent gas companies can strengthen with the increasing exploitation of the LNG fields. Further research indicates that not only a number of existing LNG capacities and plants can be appealing for investors, but also the existing tax incentives: export tax exemptions and MET exemptions for Yamal and Far East LNG export projects, direct financial support as well as technical assistance are available. Besides that, no export tax exists for the LNG trade, however, the Government does oversee trade in LNG. Major LNG plants under construction are: Yamal LNG, LNG project on the Gydan Peninsula, Sakhalin-1 LNG and Sakhalin-2.

Equally important is the present project to develop export infrastructure for LNG between Russia and Asia Pacific region. This will help to diversify the existing export market and gain share of the increasing demand for gas in China particularly.

#### 4.4: Threats

#### 4.4.1: Competition

Intense competition on the Russian oil and gas market is one of the major complication and threat for the future investors. As the core producing and exporting companies, such as Transneft and Gazprom, are owned by the Government of Russian Federation, other companies can only expect to achieve a small market share, while investment into the government-owned companies is troublesome. However, what is more threatening is the ever more increasing power of the certain state companies through their participation in exclusive deals and projects. To be specific, the Power of Siberia gas transmission system will open the way for Gazprom to be the major, or even the only one, exporter of Russian gas to China. Gazprom and CNPC signed an agreement in 2014 for 30 years to supply China with 38 billion cubic meters of gas per year along the "eastern" route - the Power of Siberia gas pipeline. In 2017 partners signed an agreement on the basic conditions for the supply of Russian gas to China along the "western" route ("Siberia-2 Power"). And now the negotiations with the Chinese partners are continuing. Chinese economy is growing steadily, even after a recent slowdown, and it can be expected that more international companies will be basing their production facilities in China. Growing demand for energy sources coupled with new factories demanding energy can increase the demand for Russian gas. And of course, such an opportunity can bring high returns for investors, but what can also be expected is the regulation by the Russian government on exportation of gas and oil to consumers in Far East and China. In this way, Gazprom will not only hold the monopoly on the natural gas export and pipelines usage (UGSS), but also hold an "exclusive right" to export energy to China. In this way, investors should take precautions and rely mainly on the export to EU or supplying the Russian market.

## 4.4.2: Refining capacity

The long-term outlook at the oil industry highlights the disadvantage of the refineries in Russia. Although the Russian refining system is the 3<sup>rd</sup> largest in the world behind the United States and China, the majority of refineries are still unmodernized, outdated and inefficient (IEA, 2014). The Energy Strategy 2030 highlights the problem of the average refineries depth of processing being only 71,5 percent, yielding a high proportion of low-value oil products, such as fuel oil. The strategy set a target to increase the depth to 89-90 percent by 2030. However, government will not provide financing for the modernization of

the refining technology and ordered state-controlled companies and other vertically integrated companies to invest in the modernization of refineries and the expansion of capacity. However, currently there is no sign of improvements and recent data cannot be found on the state of the development. What can be said, however, is that refineries capacity and "quality" can be improved only with the improvement of fuel quality standards. Still, those standards have not been improved "which has brought some unpredictability and challenges for companies that had done the investments without being able to fully reap the benefits" (IEA, 2014: 149).

#### 4.4.3: Environmental issues

Social responsibility is an important term and obligation for many businessmen and investors. Investment into companies which use child labor, pollute the environment or harm the economy of the region is seen as a threat for future relations and business ties. Social responsibility is vital to businesses and investors because it demonstrates to consumers that the company takes an interest in wider social issues that have no direct impact on profit. If an investing company has a healthy social responsibility policy, then investing into Russian oil industry may be a direct threat of breaching this policy. Above all, even if such program does not exist in one company, it should not underestimate the environmental or health damage it can cause involving into certain business matters. A comprehensive view on the issue has been shown by the Greenpeace organization, which documented and investigated the extent of oil spills in Russia. In 2010 BP spilt 4,9 million barrels (app. 0,6 million tons) into the Gulf of Mexico and it was considered as one of the most environmentally damaging action of the 21st century. By contrast, Russian oil industry spills 30 million barrels each year (Greenpeace, 2016). The most polluted region is the Komi Republic. Komi has been visited by Greenpeace "investigators" several times who filled a number of complaints. Even so, Usinsk oilfield is believed to be continuing to spill oil every year, damaging the flora and fauna of the region. After all, population in the region is highly dependent on fishing and agricultural activities.

What is notable, is that Greenpeace suggests that Russia might also be harming the Arctic environment with its offshore fields and spills into water. Investors in this case should require oil companies to provide information regarding costs for actions taken and an assessment of the effectiveness of such actions.

## Conclusion and Evaluation

Foreign direct investment can be seen as a tool for the prosperity of the certain sectors and industries, as well as the whole economy: it can stimulate production capacity, upsurge forward the standards of living, provide employment, bring new technology and skills to the industry. However, an essential question arises of what investors can get in return and whether there will be any return.

The first part of the thesis described and gave an insight on the prosperity and current position of agriculture in Russia. New century brought profound changes to the pace of development and value of agriculture to the economy. Agricultural activities still drive attention of the officials to the existing problems within the sector. Economic development, technological advancement, export possibilities and volumes are thought to be of the most importance. Russian agricultural sector is being promoted by various means of state support, and therefore, displays considerable advancements. Production and export are increasing steadily, diversification among products and regions is further supported by the state programs. Facilitation of further progress should be backed by financial support in the form of foreign direct investment into the sector. Incentives to the promote investment in agriculture exist today and could potentially attract new investors, while at the same time proper scrutiny should be adapted while examining potential risks. Based on the SWOT analysis, it was identified that foreign investors may find it beneficial to invest into agriculture in Russia, as in the long-term there exist opportunities which either stimulate investment and assure high rates of return, or make establishing of new operations less costly. It all boils down to the fact that investment in agriculture is seen as prosperous in the long term, and the "weight" of strength and existing opportunities is stronger than the potential risks. I personally advice foreign investors or companies to invest into the agricultural sector, however finding a local agent or partner will be beneficial. In this way investment will not bare any problems with getting finance, registering land plots or preparing annual reports. Moreover, my conviction is that a broader research can be conducted by investors on the question of future prosperous agricultural commodities.

The energy sector has also undergone major changes, mainly in the concentration of power: monopolies are thought to not exists, however, Chapter 3 and the SWOT analysis in Chapter 4 aimed attention at the solid power of Gazprom. In this way even though the

energy market is big, including both domestic consumers and foreign buyers, investors should bare in mind that they can only invest into private companies, which seem to be in a worse position. Besides, without a stable political situation, investing into the strategic and major sectors of the Russian economy can mean excessive risk and unpredictability.

Russia may in future open new export markets for oil and gas products, expanding its power in supplying foreign markets, but the question is whether foreign investors or companies will be allowed to participate in energy activities or projects initiated by the Russian entities. Apart from that, Russian oil and gas industries may in the future become less competitive or even less cost-effective in the way that modernization is not taking place. What I can advise is to focus on new unconventional sources of energy, which has not been yet regulated by the government, and where competition is less intense. Shale gas and shale oil is an example. Moreover, future regulations on greenhouse gas emissions can be studied and monitored before investing into conventional gas and oil. Overall, the oil and gas industries bring revenue for the Government of Russia, but for FDI it mainly represents small profit and high risks.

Overall, this paper demonstrated that investment into energy and agricultural sectors in Russia can be worthwhile. The hypothesis was partly confirmed: FDI into agriculture has potential to benefit FDI, while the SWOT analysis for the energy sector uncovered instability, uncertainty and even legal actions foreign investors may face.

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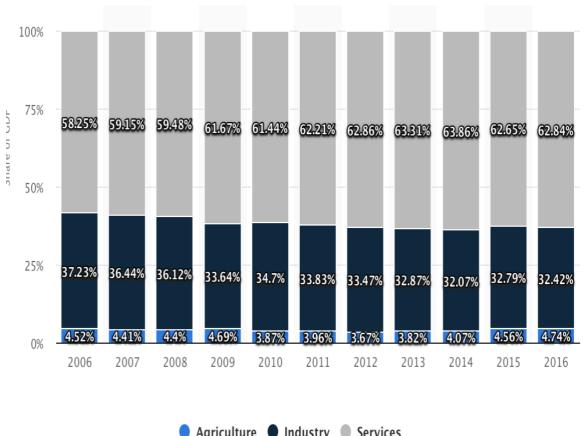
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# Annexes

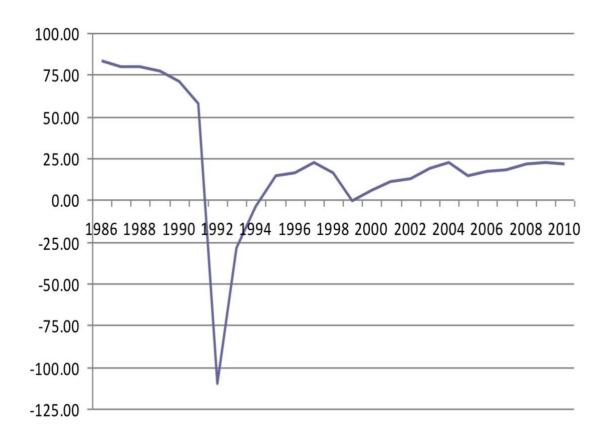
Table 11: Distribution of GDP across economic sectors, 2006-2016.



■ Agriculture ■ Industry ■ Services

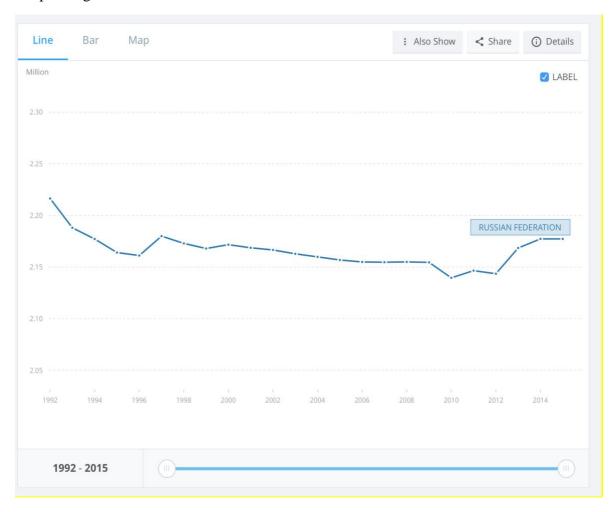
Source: Statista Inc. 2017

Graph 4:Share of PSE in the total value of total gross farm receipts



. Source:OECD, 2017

Graph 5:Agricultural land.



Source: World Bank Data, 2016

Table 12:Gross harvest and yield of selected grains and grain-legumes.

(enterprises of all types; weight after processing)

(checipinos of an oppos, weight after processing)											
	1992	2000	2005	2010	2012	2013	2014	2015	2016		
	Gross harvest, mln. ton										
Wheat, winter and spring	46.2	34.5	47.6	41.5	37.7	52.1	59.7	61.8	73.3		
Rye, winter and spring	13.9	5.4	3.6	1.6	2.1	3.4	3.3	2.1	2.5		
Maize for grain	2.1	1.5	3.1	3.1	8.2	11.6	11.3	13.2	15.3		
Barley, winter and spring Oats	27.0 11.2	14.0 6.0		8.4 3.2	14.0 4.0		20.4 5.3		18.0 4.8		
Millet, thou. ton	1535	1124	455	134	334	419	493	572	630		
Buckwheat, thou. ton	1038	997	605	339	797	834	662	861	1186		
Rice, thou. ton	754	584	571	1061	1052	935	1049	1110	1081		
Grain-legumes	3.1	1.2	1.6	1.4	2.2	2.0	2.2	2.4	2.9		

Table 13: Production of basic agricultural products by types of enterprises. Percentage of total production volume

	1992	2000	2010	2012	2013	2014	2015	2016	
	Agricultural enterprises								
Grains (weight after processing)									
Sugar beet	97.4	90.8	77.1	76.8	74.5	73.7	72.7	71.4	
Sunflower seeds 1)	97.8	94.5	88.7	87.6	89.6	89.2	89.0	88.1	
Potatoes	93.0	84.3	73.0	72.1	70.5	70.1	70.3	68.7	
Vegetables	21.2	7.5	10.5	13.1	10.9	12.1	13.8	13.6	
Fruit and berries	44.5	22.9	17.1	17.1	16.3	16.5	17.9	18.9	
Livestock and poultry for slaughter (slaughter weight)	49.0	15.7	15.0	21.8	21.2	21.5	21.6	23.7	
Milk	64.0	40.2	60.6	66.9	70.3	72.4	74.5	76.1	
Eggs	68.1	47.3	44.9	46.5	46.0	46.7	47.8	49.0	
Wool (physical weight)	73.9	70.8	77.1	78.0	78.1	77.8	78.5	79.1	
4 3 8 ,	67.0	37.8	19.7	Household	18.3	17.9	17.0		
				Household	enter prises				
Grains (weight after processing)									
1 0,	0.5	0.8	1.0	1.0	0.9	1.0	1.0	0.9	
Sugar beet	0.2	0.6	0.4	0.4	0.5	0.5	0.4	0.2	
Sunflower seeds 1)	1.2	1.2	0.6	0.5	0.4	0.5	0.4	0.4	
Potatoes	78.0	91.2	84.0	78.9	82.3	80.4	77.6	77.9	
Vegetables	54.7	74.7	71.5	69.1	69.4	69.9	67.0	66.5	
Fruit and berries	50.7	84.1	82.8	76.6	77.3	76.7	76.3	74.4	
Livestock and poultry for slaughter (slaughter weight)	35.3	58.0	36.5	30.2	26.9	24.7	22.6	21.0	
Milk	31.4	50.9	50.4	48.1	48.1	47.1	45.6	44.0	
Eggs	26.0	28.8	22.1	21.2	21.2	21.4	20.6	19.9	
Wool (physical weight)	32.2	56.8	54.4	52.0	49.1	49.0	49.2		
	Peasant (farm) enterprises <sup>2)</sup>								
Grains (weight after processing)									
Sugar hoot	2.1	8.4	21.9	22.2	24.6	25.3	26.3	27.7	
Sugar beet Sunflower seeds 1)	2.0	4.9	10.9	12.0	9.9	10.3	10.6	11.7	
	5.8	14.5	26.4	27.4	29.1	29.4	29.3	30.9	
Potatoes	0.8	1.3	5.5	8.0	6.8	7.5	8.6	8.5	
Vegetables Fruit and berries	0.8	2.4	11.4	13.8	14.3	13.6	15.1	14.6	
	0.3	0.2	2.2	1.6	1.5	1.8	2.1	1.9	
Livestock and poultry for slaughter (slaughter weight)	0.7	1.8	2.9	2.9	2.8	2.9	2.9	2.9	
Milk	0.5	1.8	4.7	5.4	5.9	6.2	6.6	7.0	
Eggs	0.1	0.4	0.8	0.8	0.7	0.8	0.9	1.0	
Wool (physical weight)	0.8	5.4	25.9	30.2	32.6	33.1	33.8		

Table 14: Commodity Structure of Exports of Russian Federation.

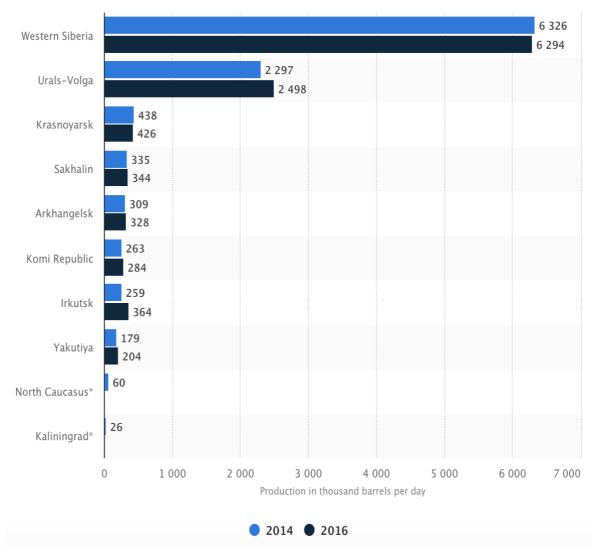
(at actual prices)

(at actual prices)									
	2000	2005	2010	2012	2013	2014	2015	2016	
	Bln. US dollars								
Exports - total	103	241	397	525	526	497	344	285	
including:									
foodstuffs and agricultural raw materials (excluding textile)	1.6	4.5	8.8	16.8	16.3	19.0	16.2	17.0	
mineral products	55.5	156	272	374	376	350	219	169	
chemical products, rubber	7.4	14.4	24.5	32.1	30.8	29.2	25.4	20.8	
leather raw materials, fur and articles thereof	0.3	0.3	0.3	0.5	0.6	0.4	0.3	0.3	
wood, pulp-and-paper products	4.5	8.3	9.6	10.2	11.0	11.6	9.8	9.8	
textiles, textile articles and footwear	0.8	1.0	0.8	0.8	0.9	1.1	0.9	0.9	
metals, precious stones and articles thereof	22.4	40.6	50.3	58.3	55.1	52.3	40.8	38.0	
machinery, equipment and transport means	9.1	13.5	21.3	26.6	28.8	26.5	25.4	24.3	
others	1.6	2.5		5.6	6.6	7.0	5.5	5.5	
				Percent	of total				
Exports - total including:	100	100	100	100	100	100	100	100	
foodstuffs and agricultural raw materials (excluding textile)	1.6	1.9	2.2	3.2	3.1	3.8	4.7	6.0	
mineral products	53.8	64.8	68.5	71.3	71.5	70.4	63.8	59.2	
chemical products, rubber	7.2	6.0	6.2	6.1	5.9	5.9	7.4	7.3	
leather raw materials, fur and articles thereof	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
wood, pulp-and-paper products	4.3	3.4	2.4	1.9	2.1	2.3	2.9	3.4	
textiles, textile articles and footwear	0.8	0.4	0.2	0.1	0.2	0.2	0.3	0.3	
metals, precious stones and articles thereof	21.7	16.8	12.7	11.1	10.5	10.5	11.9	13.3	
machinery, equipment and transport means	8.8	5.6	5.4	5.1	5.5	5.3	7.4	8.5	
others	1.5	1.0	•••	1.1	1.3	1.4	1.6	1.9	

Table 15: Commodity Structure of Imports for Russian Federation.

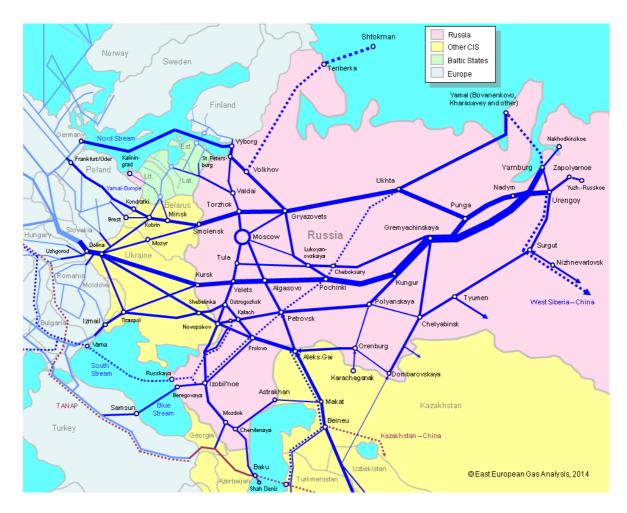
	2000	2005	2010	2012	2013	2014	2015	2016	
	Bln. US dollars								
Imports - total	33.9	98.7	229	317	315	287	183	182	
including:									
foodstuffs and agricultural raw materials (excluding textile)	7.4	17.4	36.4	40.7	43.3	40.0	26.6	24.9	
mineral products	2.1	3.0	5.2	7.5	6.9	7.3	5.0	3.2	
chemical products, rubber	6.1	16.3	37.0	48.6	50.0	46.5	34.0	33.8	
leather raw materials, fur and articles thereof	0.1	0.3	1.2	1.7	1.5	1.3	0.8	0.8	
wood, pulp-and-paper products	1.3	3.3	5.9	6.2	6.6	5.9	3.6	3.4	
textiles, textile articles and footwear	2.0	3.6	14.1	18.0	18.0	16.3	10.8	11.0	
metals, precious stones and articles thereof	2.8	7.7	16.8	23.3	22.6	20.6	12.3	11.8	
machinery, equipment and transport means	10.7	43.4	102	158	153	137	81.9	86.3	
others	1.4	3.7		12.9	13.5	12.7	7.7	7.1	
	Percent of total								
Imports - total including:	100	100	100	100	100	100	100	100	
foodstuffs and agricultural raw materials (excluding textile)	21.8	17.7	15.9	12.8	13.7	13.9	14.5	13.7	
mineral products	6.3	3.1	2.3	2.4	2.2	2.6	2.7	1.8	
chemical products, rubber	18.0	16.5	16.1	15.3	15.9	16.2	18.6	18.5	
leather raw materials, fur and articles thereof	0.4	0.3	0.5	0.5	0.5	0.4	0.4	0.4	
wood, pulp-and-paper products	3.8	3.3	2.6	2.0	2.1	2.1	2.0	1.9	
textiles, textile articles and footwear	5.9	3.7	6.2	5.7	5.7	5.7	5.9	6.0	
metals, precious stones and articles thereof	8.3	7.7	7.3	7.3	7.2	7.1	6.7	6.4	
machinery, equipment and transport means	31.4	44.0	44.4	49.9	48.5	47.6	44.8	47.4	
others	4.1	3.7		4.1	4.3	4.4	4.2	3.9	

Table 16: Russia's oil production by region (thousands barrels/day) in 2014 and 2016



Source: Statista Inc., 2017

Map 1: Major gas pipelines of Russia



Source: East European Gas Analysis, 2013