#### **International and Regional Economics**

UDC 330.834.4:338.1(470)

L. Shabalina, *PhD (Economics)*,

A. Kapko,

Donetsk National Technical University

### ANALYSIS OF RUSSIAN MARKET OF FOODSTUFFS AND AGRICULTURAL RAW MATERIALS IN MODERN CONDITIONS OF MANAGING

Features of global food market's functioning are the most important factors of the Russian Federation's (RF) food industry development in the context of import substitution policy. Russia is a major net importer of food and agricultural raw materials, the annual purchase of these products worth more than 10 billion U. S. dollars (USD). Food security, along with the military one, is a key area of the RF's activity in the context of the current geopolitical situation. Therefore, it is advisable to pay attention to such sector of international trade, as the market of agricultural raw materials and food products

The problems of the modern world's international trade in the food sector was given attention in the works of Druck P., Magud N., Katasonov V., Pakhomov A., Kuznetsova E. G., etc. Features of modern Russian food market were highlighted in the works of Salahov N., Vasilieva N. A., Palachov R., Rudakov D., Voronin B. V., etc.

The aim of this work is to identify the main problems and prospects of development of RF's market of foodstuffs and agricultural raw materials.

The object of the research is the modern market of international trade.

The subject of the research is peculiarities of the modern Russian market of agricultural raw materials and foodstuffs.

Until the crisis of 2007-2009 years, for nearly a decade, international trade had growth rates which exceed the rate of global GDP on average 2 times. After the crisis the growth rate of the world's economy and world's trade began to move closer, and then there was a trade gap from the global economic growth. In 2012 -2013 years the growth of world trade was less than 3%. For comparison, the long-term average growth rate of world trade in the pre-crisis 2001-2006 years reached 7.1%. According to experts of the Netherlands Bureau for Economic Policy Analysis (The Hague), for the first time in 2015 year in comparison with 2009 year there was a decrease in international trade volumes by 13.8% (we are talking about the value, which is measured in USD). It should be noted that according to IMF estimates the growth of world GDP was 3.1% in the same 2015 year [1, p. 54].

The combination of moderately positive dynamics of GDP and sharply negative dynamics of world trade in 2015 year can lead to a situation where the world's GDP may acquire a negative bias in 2016 year, i.e. there will be a global economic collapse (fig. 1).

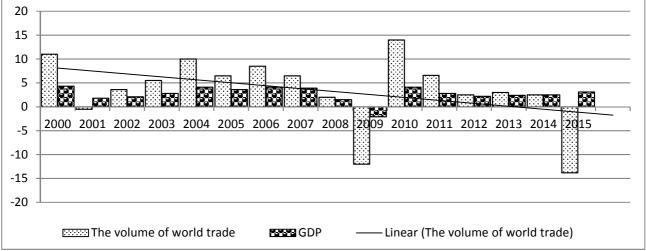


Fig. 1. Volume of world trade and GDP, %

Note: compiled by the authors according to the World Trade Organization https://www.wto.org/english/res\_e/statis\_e/its\_e.htm.

Experts explain the highly sharp falling of the world trade in 2015 year in different ways. First of all, they talk about a sharp drop in oil prices by 55.2% compared to 2014 year, as well as the depreciation of most national currencies against the USD, by means of which the value of world trade are measured. Many countries continued to supply sharply depreciating products by inertia for maintaining their market position in 2015 year. Attempts to stimulate exports by currency dumping will deplete the national economy even more [2].

Currency dumping is dangerous for the organization of international trade as it leads to a complete disruption of the market and there is a possibility of a trade war. A country, that uses a currency dumping, increases the profits of exporters, but at the same time it reduces the living standards of the population because of increasing prices on the domestic market. Then the country (the object of the currency dumping) reduces the development of the economy in different sectors that are not able to compete with cheap foreign goods. The result is raise of unemployment rate.

In the structure of modern commerce, there is a tendency for proportion of agricultural products to reduce, while simultaneously there is rising tendency for share of manufactured goods in trade. Trade in knowledge-intensive and high-tech manufactures is increasing particularly rapidly (table 1).

Table 1

#### The structure of world trade

	Value,	Share in	Annual percentage change					
	bln. USD	the world	2000-	2005-	2010-	2012	2013	2014
	2014	trade, %	2005	2010	2014			
Agricultural products	1765	9,5	9	10	7	-1	5	2
Agricultural products (AoA)	1454	7,9	10	11	7	1	5	1
Non-agricultural goods	16850	91,1	10	8	5	0	2	1

Note: Agricultural products according to the AOA (WTO Agreement on Agriculture) definition refer to HS chapters 1 to 24 (excluding fish and fish products) and a number of manufactured agricultural products. This definition does not correspond to the definition of agricultural products presented in the breakdown of the structure of world trade.

Note: compiled by the authors according to the World Trade Organization https://www.wto.org/english/res\_e/statis\_e/its\_e.htm.

The largest exporter of agricultural products is the countries of South and Central America (30.6%) and importer is Africa (15.6%) (Table 2.). According to the Food and Agriculture Organization of the United Nations (FAO), the proportion of agricultural exports is significant in some developing countries of South America with traditional agricultural specialization

(Paraguay – 89.3%, Argentina – 51%, Brazil – 28%) and developed countries (New Zealand – 46.3%, Greece – 20.4%). The share of the largest food exporter (the USA) is 11.2% of world exports, and American export's structure has a high degree of diversification with the predominance of soybeans, corn and wheat [4, p. 21].

Share of agricultural products in trade in total merchandise and in primary products by region, 2014 [3, p. 73]

Table 2

	Ex	ports	Imports		
Region	Share in total	Share in pri-	Share in total	Share in primary	
	merchandise	mary products	merchandise	products	
World	9,5	31,8	9,5	31,8	
North America	11,1	40,0	6,9	30,3	
South and Central America	30,6	43,3	9,4	29,3	
Europe	10,6	48,7	10,5	36,7	
Commonwealth of Independent States	9,2	12,2	12,0	52,0	
Africa	11,5	15,4	15,6	47,1	
Middle East	2,3	3,4	12,2	52,5	
Asia	6,7	37,3	9,0	24,7	

The imports' volume of agricultural crops and livestock products in value terms has a rising trend, where the greatest volume belongs to the countries of Europe and Asia. A noticeable decline (more than 10%) is explained by the desire of countries to reduce costs during the years of the global financial crisis (fig. 2). A similar trend is observed in exports. However, major exporters are Europe and America (Fig. 3). The structure of America and Oceania is dominated by exports, whereas import structure prevails in Europe, Asia and Africa.

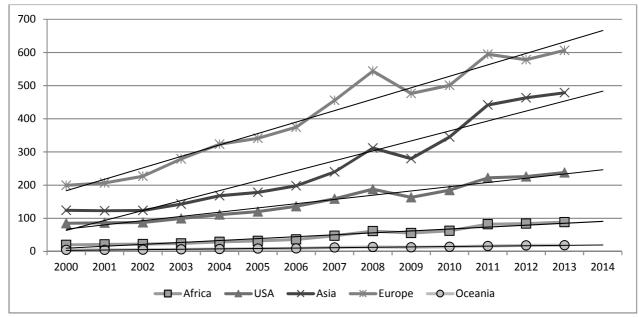


Fig. 2. The imports' volume of crops and livestock products, bln. USD

Note: compiled by the authors according to FAOSTAT http://faostat3.fao.org/home/E.

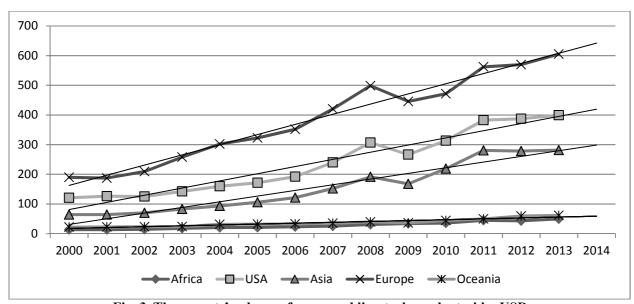


Fig. 3. The exports' volume of crops and livestock products, bln. USD

Note: compiled by the authors according to FAOSTAT http://faostat3.fao.org/home/E.

The ongoing global financial crisis has a direct negative impact on the world food market, reducing food security in many countries (table. 3). So, during the past 4 years the index of food security of Russia has fallen by 4.3 points, Japan – by 2.3, Belgium – by 2.1.

In these circumstances, the growth of food prices is becoming a major global problem, because first of all agricultural products become more expensive (table 4). Thus, the prices of agricultural products have increased by 11% from 2009 to 2010 years, from 2010 to 2011 – by another 22%. Despite the fact that in subsequent years there has been a marked decline in prices, if we take 2009 year as a basis, then prices tend to in-

Table 3
Global food security index [5 p 18]

2014 64,1 78,0 79,7	2015 63,8 77,4 79,5	4-years change -4,3 -2,3
78,0	77,4	-4,3
78,0	77,4	
,		-2,3
79,7	70.5	
	17,5	-2,1
85,1	85	-1,6
80,08	79,9	-1,1
83,9	83,8	-1,1
74,6	73,5	-1
83,7	82,6	0,7
85,2	84,4	-0,6
80,5	78,9	-0,5
68,4	67,4	-0,5
	83,9 74,6 83,7 85,2 80,5	83,9 83,8 74,6 73,5 83,7 82,6 85,2 84,4 80,5 78,9

Table 4

Actual prices and forecast, the indices [7, p. 2]

	Actual prices					Forecast			
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Agricultural products	89	100	122	114	106	103	89	49	62
Foodstuffs	93	100	123	124	116	107	91	89	91
Crops	99	100	138	141	128	104	89	86	88
Food fats and oils	90	100	121	126	116	109	85	83	86
Other food products	90	100	111	107	104	108	100	100	101
Beverages	86	100	116	93	83	102	94	93	92

Note: 2010 is the base (2010 = 100%).

crease. According to World Bank data, the increase in food prices will continue for another few years, and Goldman Sachs experts even put into circulation a new term "agflation" – a sharp rise in prices of agricultural products [6].

The share of TNCs in international trade exceeds half of its volume, and in some industries reaches 80 – 90%. Despite the fact that only 16% of the world's agricultural production is traded on international markets,

agro-western TNCs have a significant impact on the dynamics and structure of production and consumption of food worldwide. If we talk about agricultural products that are most dependent on TNCs, it is worth noting the wheat (90%), corn (85%), tea (75%) and bananas (70%) [8, p. 147].

There is a large number of multinationals, which are registered in different countries. Table 5 presents data of Fortune Global 500 largest companies, operating in the food markets, ranked by volume of sales.

The largest companies in the manufacturing of foodstuffs [9, p. 148]

Table 5

Company	Country	Sales volume,	Profit,	Place in rating	
	_	mln.USD	mln. USD.	2014 year	
Nestle	Switzerland	99,45360	10,80780	72	
Acher Daniels Midland	USA	89,804	1,342	87	
PepsiCo	USA	66,415	6,740	137	
Unilever	Britain, Nether-	66,108.60	6,42810	140	
	lands				
Bunge	USA	62,564.00	306	153	
Wilmar International	Singapore	44,085.00	1,31890	239	
JBS	Brazil	43,049.70	4295	251	
Mondelez International, Inc	USA	35,299	3,915	332	
Tyson Foods, Inc	USA	34,482	778	93	
Danone	France	28,27440	1,88780	429	

At this stage of development, foreign corporations have full control over the number of key sub-sectors of Russian food industry, which is a direct threat to food security, as well as a negative impact on the national economy. The monopoly of multinational companies in the food market is the greatest damage to the domestic manufacturers as suppliers of raw materials for the processing industry. In most sub-sectors of Russian market the largest market share of food and beverage industry is owned by foreign corporations: almost 60% of the milk processing market, more than 70% of the juice products market, about 80% of the frozen fruits and vegetables market, more than 90% of fruit and vegetable preservation market, more than 80% of the brewing market. So, today in Russia there are 10 major transnational corporations that produce most of the products purchased by Russians: Nestle, Cargill, PepsiCO, Kraft Foods, Coca-Cola, Kellogg's, P & G, Mars, General

Mills, Unilever. Juice market is jointly controlled by Coca-Cola and PepsiCo, which is 40% of the Russian soft drinks market. PepsiCo and Danone-Unimilk control dairy production, it is about 40% of the dairy market in Russia.

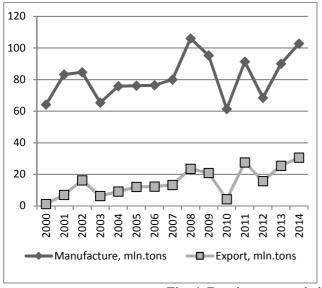
Currently, domestic companies still retain the lead in the markets of the meat processing (company "Cherkizovo" takes 13% of the RF's market of meat products) and bakery products (Makfa – more than 23% of the total pasta production in Russia), however, the same trend can be traced there - the absorption of small companies by large western ones [10].

In general, data on RF's foreign trade of food indicates a fourfold excess of imports over exports in 2010, while total export exceeded the import by almost 2 times. The overall growth of Russian export is associated largely with the growth of grain production and its

derivatives, increase in export's volumes of fish, alcoholic beverages and vegetable oil.

Being an exporter of many basic food commodities, Russia has turned into a net importer. Situation has significantly changed in 2014 year, when the gap between food exports and imports decreased by 2 times,

due to the import substitution policy in terms of economic sanctions. In this regard, in 2014 year compared with 2013 year, the imports' volume of agricultural raw materials and foodstuffs decreased by 8% and reached 39905 mln. USD, while the domestic production's volume of crops increased by almost 15% (Fig. 4).



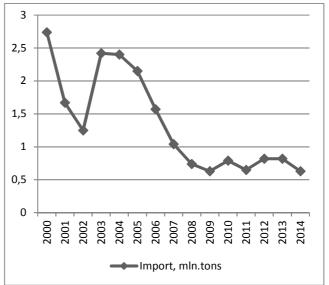


Fig. 4. Russian economic indicators of crops [5, p. 19]

It should be noted that meat products manufacturing sector has made the greatest success in the food industry. In 2014, the volume of meat production increased by 5% and reached 8911 thous. tons in farms of all categories, while imports of meat products decreased by 23% (table. 6).

Sanctions and counter-embargo reduces Russia's export potential. Nevertheless, Russia remains the larg-

est supplier of agricultural products. According to experts of the Center for International Trade, Russia exports its products to 140 countries. At the end of 2015 food exports could reach 20 bln. USD. More than two thirds of Russian export's volume of food and agricultural products is focused on foreign countries, such as Germany, the Netherlands, Africa and China. Now, the base of Russian agricultural export is crops, vegetable oil, meat, poultry, fish and seafood [11].

Table 6

Manufacture of the main agricultural products [5, p. 20]

Manufacture of the main agricultural products [5, p. 20]								
	2010	2011	2012	2013	2014			
	Me	at and meat products (th	ous. tons)					
Manufacture	7167	7460	8090	8545	8911			
Import	2855	2687	2710	2480	1902			
Milk and dairy products (thous. tons)								
Manufacture	31847	31718	31756	30529	30553			
Import	8159	7936	8516	9445	8995			
Potatoes (thous. tons)								
Manufacture	21141	32681	29533	30184	31502			
Import	1122	1539	735	764	1045			
Vegetables and melons food (thous. tons)								
Manufacture	13278	16270	16079	16109	16885			
Import	3158	3155	2806	2817	2929			
Eggs and egg products (mln. pcs.)								
Manufacture	40600	41113	42033	41286	41859			
Import	901	1191	1345	1206	1235			
Corn (mln. tons)								
Gross harvest	61	94,2	70,9	92,4	105,3			
Import	0,4	0,7	1,2	1,5	0,9			

Note: compiled by the authors according to Rosstat http://www.gks.ru/.

Table 7

Replacement of expensive products for cheaper did not lead to lower prices for the products in retail, as logistics costs increased. In other categories there was a replacement of cheaper products for more expensive.

There is a tendency of imbalance in the structure of food consumption, while in recent years there is a positive trend of convergence of the actual and the recommended standards set by the Ministry of health and social development of the Russian Federation. So, if we

compare standards to actual consumption pattern, we can draw the following conclusions.

Firstly, meat and meat products (deviation - 21,9%), milk and dairy products (-14,7%), vegetables and melons (-18,1%), fruits and berries (-40%) are not enough in the structure of Russian population's nutrition.

Secondly, there is excessive consumption of grain products (+20.5%) and potatoes (+0.6%) (table. 7).

The comparison of the norms with the actual structure of food consumption in RF [12]

Consumption (average per person per year) Rational standards Nomination the working-age pensioners children kg/year/person population Grain products, kg 126,5 98.2 77.6 95-105 100,4 95-100 Potatoes, kg 80 88,1 Vegetables and melons, kg 114,6 98 112,5 120-140 Fresh fruits, kg 45 118,1 90-100 60 Sugar, kg 23,8 21,2 21,8 24-28 Meat products, kg 58,6 54 44 70-75 18-22Fish products, kg 18,5 16 18,6 320-340 290 Milk, kg 257,8 360.7 Eggs, pieces 210 200 201 260 pieces Vegetable oil, kg 10-12 11 10 5 Other products, kg 4.9 4,2 2,5-3,5 3,5

Thirdly, Russia's accession to WTO had a negative impact on the state of the domestic fish market. Export duties were reduced considerably, it led to fish exports growth to South-East Asia. Thus, there is the overall growth of fish catch (4.3 mln. tons) with declined fish delivery to the domestic market.

Fourthly, there is a lack of food affordability. The problem of poverty is quite acute in Russia. According to State Statistics Committee, the proportion of the population with incomes below the subsistence minimum amounted to 23 mln. pers., or 16% of the population in 2015 year [12]. There remains money polarization of income distribution of the population, both in social groups and in inter-regional aspect. Accordingly, it retains a deep differentiation of food consumption by the population of the various social groups.

Fifthly, there is a lack of physical accessibility of food. Agricultural production is carried out only by 12 – 13% of the territory in Russia. At the same time it is distributed very unevenly across the territory: 14 regions provide over 40% of the gross output of the agricultural sector. The irregularity of agricultural production may threaten food security of individual regions [13, p. 116].

Such risks of food security, as the erosion of small farms and the excessive concentration of agricultural production, as well as the accountability of a large part of the largest manufacturers of agricultural products and foodstuffs to foreign legal entities (over 50%) justified in Russia. There is a lack of funding from the regional budget for research and development for future imple-

mentation into crop and livestock production [14, p. 8]. The lack of various fairs and exhibitions can be also highlighted. Therefore, it is advisable to conduct such activities, as the "Prodexpo", for maintaining Russian exporters and discovering new potential export destinations, as well as establishing new international contacts to smooth the acute geopolitical situation.

So, the decreasing in the world's trade, as well as the decreasing in the share of agricultural products in its structure was revealed. The analysis showed the dominant role of TNCs in the food sector in the world in general, and in Russia. The increasing of production and exports with a simultaneous decreasing of the imports' volume was noted in Russia, which is typical for the import substitution policy. The basic problems in Russian food sector, such as the unbalanced structure of food consumption, insufficient economic and physical access to food, lack of funding for research and development, etc were identified.

#### References

1. **Druck P.** Collateral Damage / P. Druck, N. Magud, R. Mariscal // Finance and Developmen. – 2015. – №4 (52). – Р. 52-55. 2. **Катасонов В.** Мировая торговля: тревожные симптомы 2015 года [Электронный ресурс] / В. Катасонов // Фонд стратегической культуры. – 2016. – №3 (Март). – Режим доступа: http://www.fondsk.ru/news/ 2016/03/02/miro vaja-torgovla-trevozhnye-simptomy-2015-goda-38897. html. 3. **International** Trade Statistics 2015. – Switzer-

land: World Trade Organization, 2015. – 166 p. 4. Baсильева Н.А. Конкурентная среда мирового продовольственного рынка как фактор развития предприятий пищевой промышленности России / Н.А. Васильева // Научный журнал НИУ ИТМО. Серия «Экономика и экологический менеджмент». - 2012. -№1(10). – С. 12-25. 5. Шабалина Л. В. Анализ конкурентоспособности российского рынка продовольственных товаров / Л.В. Шабалина, А.В. Капко // Конкурентоспособность экономики в эпоху глобализации: российский и международный опыт: сборник научных трудов V Международной научнопрактической конференции, посвященной празднованию 140-летия НИУ «БелГУ», 2016. - С. 18-22. 6. Саляхова Н. Станет ли продовольствие в России товаром, сравнимым по значимости с нефтью? [Электронный ресурс] / Н. Саляхова // Итоги. – 2008. - № 16 (618). - Режим доступа: http://www.itogi.ru/ archive/2008/16.html. 7. **Commodity** markets outlook. - Washington: World Bank Group, 2014. - July. - 27 p. 8. Мельников А.Б. Корпоративный контроль в глобальной продовольственной системе / А.Б. Мельников, Е.О. Колесникова // Вестник Волгоградского государственного университета. Серия 3: Экономика. Экология. – 2014. – №6 (29). – С. 146-151. 9. Казанцева Е.Г. Функционирование глобальных компаний на продовольственных рынках / Е.Г. Казанцева // Техника и технология пищевых производств. – 2014. – №4. – С. 146-152. 10. Угрозы продовольственному рынку России 2014 [Электронный pecypc] / RusNedra. - Режим доступа: http://www. tvernedra.ru/news/nid249.html. 11. Фаляхов Р. Россия кормит и поит [Электронный ресурс] / Р. Фаляхов // Газета.RU. - Режим доступа: http://www. ga zeta.ru/ eksport/2015/12/02 a 7930415.shtml. 12. **Фе**деральный закон от 3 декабря 2012 г. N 227-ФЗ «О потребительской корзине в целом по Российской Федерации» [Электронный ресурс] / База законов. -Режим доступа: http://bazazakonov.ru/doc/?ID= 384 5232. 13. Панаедова Г.И. Актуальные проблемы развития продовольственного рынка России в условиях ВТО / Г.И. Панаедова // ЭТАП: экономическая теория, анализ, практика. – 2014. – № 4. –С. 109-120. 14. Шабалина Л.В. Развитие агропромышленного комплекса российской федерации, как элемент решения проблемы продовольственной безопасности страны / Л.В. Шабалина, Ю.С. Коржан // Экономика и социум. — 2016. — № 4 (23). — Режим доступа: http://iupr.ru/domains\_data/files/zurnal\_23/Shabalina% 20L.V.%20Korzhan%20.

# Шабаліна Л. В., Капко А. В. Аналіз російського ринку продовольчих товарів та сільськогосподарської сировини в сучасних умовах господарювання

У статті проаналізовано особливості та тенденції товарної структури та географічних потоків торгівлі Росії. Виявлено істотний вплив ТНК на російський ринок продовольства та сільськогосподарської сировини. Визначено проблеми розвитку, місце та перспективи Росії на світовому ринку продовольства в умовах політики імпортозаміщення.

*Ключові слова:* міжнародна торгівля, експорт, імпорт, продовольчий сектор, імпортозаміщення.

## Шабалина Л. В., Капко А. В. Анализ российского рынка продовольственных товаров и сельскохозяйственного сырья в современных условиях хозяйствования

В статье проанализированы особенности и тенденции в товарной структуре и географических потоках торговли России. Выявлено существенное влияние ТНК на российский рынок продовольствия и сельскохозяйственного сырья. Определены проблемы развития, место и перспективы России на мировом рынке продовольствия в условиях политики импортозамещения.

*Ключевые слова:* международная торговля, экспорт, импорт, продовольственный сектор, импортозамещение.

### Shabalina L., Kapko A. Analysis of Russian market of foodstuffs and agricultural raw materials in modern conditions of managing

The paper analyzes the characteristics and trends in the product structure and geographical flows of Russia's trade. A significant influence of TNCs on the Russian market of food and agricultural raw materials was detected. The developmental problems, place and prospects of Russia on the global food market in terms of import substitution policy were identified.

*Keywords:* international trade, export, import, food sector, import substitution.

Received by the editors: 26.10.2016 and final form 28.12.2016