Agricultural transition and integration to the world economy: NIS case

EUGENIA SEROVA

President of the Analytical Centre AFE, Moscow

serova@iet.ru

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Agricultural Economics and Transition:

„What was expected, what we observed,

the lessons learned."

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Abstract

The paper studies the major trends in the agri-food trade in the NIS countries. It describes the trade flows, production cooperation and trade regimes within NIS countries; trade with the rest of the world and accession to the WTO. The key tested hypothesis of the paper is that intra-region trade dominate international trade in the NIS region, however this centrifugal tendency is forced by nation's specialization set in the Soviet period. The development process in the NIS countries will cause more deep international integration.

Also paper measure IIT for the NIS countries both for trade within the region and beyond it as well as IIT for some particular groups af agri-food commodities. It allowed an author to understand whether product variety explain the growth in agri-food trade within NIS and beyond it.

Key words: NIS countries, agri-food trade, trade liberalization, intra-industry trade (IIT)

JEL Classifications: P33, O13

1. Introduction

Agri-food trade within the Soviet block of the countries like trade in general between these countries was conducted under the special regulations in the CMEA (Council for Mutual Economic Assistance) with artificial prices that could significantly differ from the world market prices. In a such situation prices were not the right signals for producers; and specialization among economies had to be set by planificator center. It led to extreme concentration of production of certain commodities in particular economies or regions and therefore their heavy intra-dependency.

This was even more strongly pronounced for the FSU where agri-food sectors of the constituent republics were specialized on certain agricultural products on processing with severe monocrop consequences for some territories. Thus, one of the outstanding examples of the Soviet period was an over intensive irrigated cotton production in the Central Asia that led to the death of Aral Sea. Kazakhstan was huge area for feeding animals while slaughterhouses and processing were located mainly in Russia. Sugar refineries were concentrated in Ukraine that supplied almost all other republics with white sugar.

Liberalization of economies in the late 1980s-early 1990s and break-up firstly of CMEA, later of the USSR made former trade links irrational. From one hand liberalization had to re-establish trade links with the real comparative advantages of the economies. It was expected that trade with non-traditional partners would increase, while intra-regional trade should be diminished. But on the other hand intra-dependence of the new economies, created

in the Soviet period, has to have inertia that force these economies to keep on trading with each other. In this paper we shall try to answer the major question: which trend dominate in agri-food integration in the transitional economies - centrifugal or centripetal, or in other words what tendency dominates – integration into global trade or intra-regional integration.

This issue will be studied at example of the NIS countries, which were presumably more integrated in the Soviet period than total Soviet block of the countries

After short description of the trade development in the NIS countries we shall measure dependency and openness of agri-food sectors of the NIS countries in the last decade and intra-industry trade (IIT) of these countries. The major tested hypothesis is that global integration for these countries is more important tendency than intra-regional one.

2. Integration in the communist time

In overall Soviet agriculture five republics – Russia, Ukraine, Byelorussia, Kazakhstan, and Uzbekistan – provided more than 85% of gross agricultural output of the country. For some of the republics agriculture was the major sector of economy: in the Central Asian republics it made up to 30%, for others it was the least important sector: in Russia, Baltics, Ukraine, and Byelorussia it made around 10%. A share of rural population differed also dramatically across republics: from 27% in Russia to around 70% in Turkmenistan. The republics differed by endowment with factors of agricultural production. Agricultural lands in Russia made only 13% of its total territory while in Kazakhstan it made more than 80%, in Moldova - 75%. Kazakhstan and Turkmenistan had the vast agricultural lands with relatively low density of population (between 8 and 12 hectares per capita) while other republics had less then 2 hectares per capita. Agriculture in Central Asia was based on the massive irrigation while in Byelorussia and in many non-black soil areas of Russia farming requested drainage.

This diversity of conditions for agriculture determined specialization of the republics. But this natural specialization was also aggravated by planificator policy. Specialization of the republics called forth agri-food exchange between them. And in this respect it was very important that in the framework of the USSR, Russia was the major recipient of agri-food exports from the rest of the republics (Figure 1). Furthermore the figure proves that agri-food deliveries from other republics did not cover the needs of Russia, therefore external imports (from outside of the USSR) were mostly directed to Russia. So let us note here that Russia was the major consumer of agri-food production from the rest of the USSR.

The collapse of the Soviet Union caused also a break-up of trade relations. However, the first years of post-Soviet era there were several inter-governmental treaties, which maintained deliveries of agri-food products from some NIS to Russia. For example, under

such treaties Russia got Uzbekistan's cotton for rather long period. Also a number of multi-national free trade agreements of different level of integrity and between various combinations of the NIS countries were concluded in the 90s. Trade regimes between the NIS up to now are a subject of special regulation, normally the NIS imports are excluded from import duties and TRQs. Russia and Byelorussia have a Customs union and shipments of goods over Russia-Byelorussian boarder is not registered as import-export. For a while there were strong political intentions to sign a treaty on a common agricultural market of the NIS, which were not crowned with success.

The real outcome of all these efforts will be considered in the next division of this paper.

3. Integration inside the group

In the last years Russia has toughen trade regime for agri-food products originated from other NIS. Thus, there were restrictions for livestock products from Ukraine, Moldavian and Georgian wines and Georgian mineral water were prohibited for import to Russia, Byelorussian sugar imports was done a subject of more serious border control and so forth.

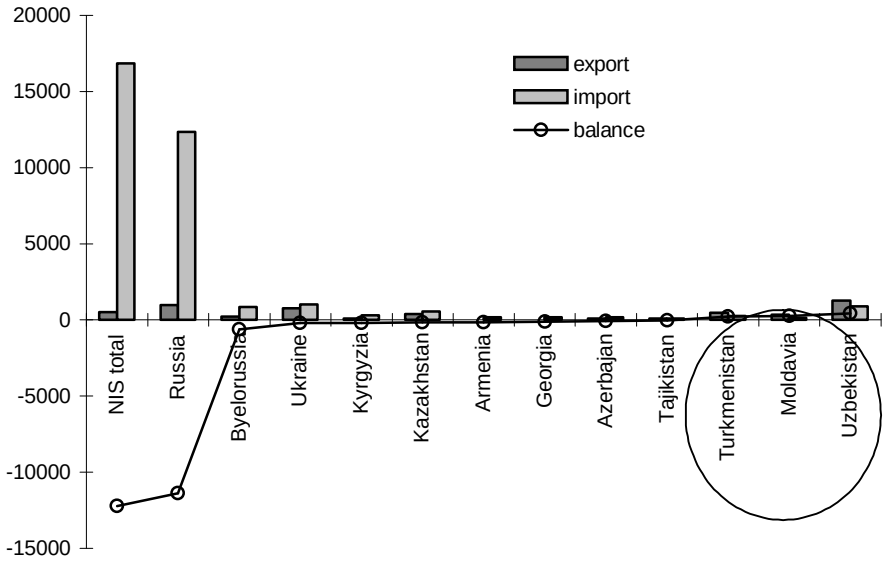
Trade integration: flows

The region as a whole has become fewer dependants on agri-food importation from outside though still remains a notable net importer (Figure 3 and Figure 4). As a base for comparison we take 1992 because inter-republican trade flows had very poor statistical records in the Soviet period, and 1992 is the first year for more or less reliable information trade between the former Soviet republics. However, this is not a good base for dynamic comparison because it was the first year of collapse of the Soviet Union, and tremendous inflow of humanitarian food aid was directed to all the countries of the region. Therefore trade statistics of this year is not enough representative.

Nevertheless the figures depict that 3 countries had steadily positive trade balance and Kazakhstan has volatile positive balance[1].

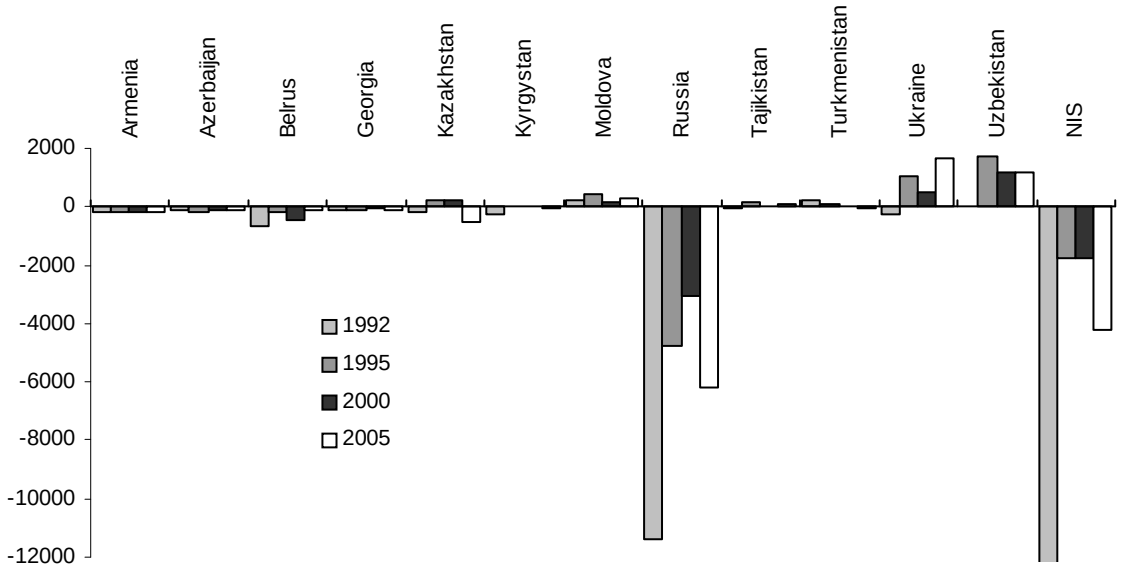
[1] Volatile trade balance in Kazakhstan is for SITC1-24, if to include wool and animal skins into calculations then trade balance is steadily positive in this country as well.

Figure 1. Agri-food trade in NIS countries, 1992, US$ million [2]



Source: Rosstat

Figure 2. Balance of agri-food trade in NIS countries, US$ million



Source: Derived from UNCTAD data and data of the AFE

Table 1 indicates that NIS countries remain heavily depending on the NIS internal market for their exports of agri-food commodities while in imports the share of the NIS is notably less important. In general the average share of trade within NIS is declining with a time during the last decade, but there is no a single trend for all countries of the region (Table 1). Thus, for Caucasian countries as well as for Kyrgystan and Tajikistan (except Azerbaijan these are the countries with political and military conflicts during the period in consideration)

[2] Whenever it is not indicated differently agri-food trade is trade with commodities SITC 1-24

dependence on imports from the NIS countries is growing. For Ukraine and Kazakhstan this dependence is diminishing (ibid). In overwhelming number of cases inter-NIS imports are represented by re-exporting of high value added food commodities from non-NIS countries via Russia. Russia (due to its geographical and infrastructure state) has become a distribution center for other NIS countries, especially those that had no boarder with the EU or access to the seaports. This fact is also reflected with the growth of Russia's exports to the NIS countries (ibid).

Table 1. Share of trade with NIS countries in total agri-food trade in NIS countries, %

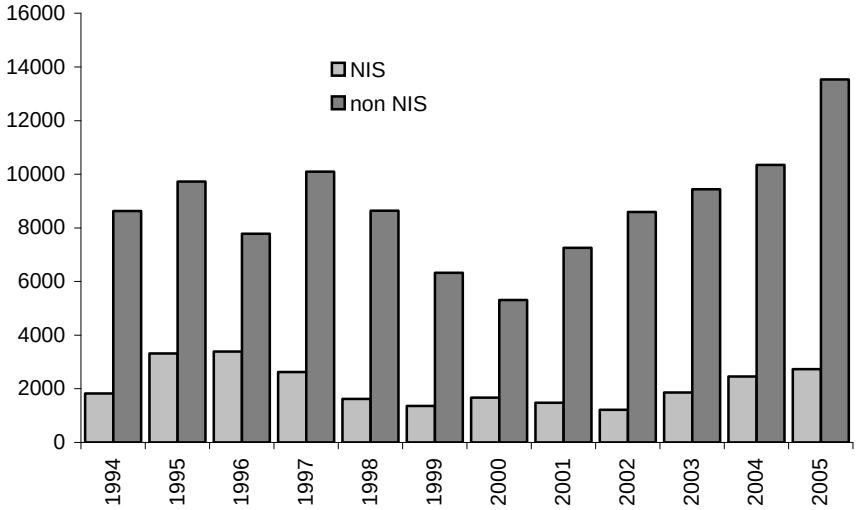
	export			import		
	1995	**2000**	**2005**	**1995**	**2000**	**2005**
Azerbajan	80.9	58.0	67.1	16.9	52.5	56.3
Armenia	92.7	87.7	89.7	11.3	8.7	46.5
Byelrussia	77.9	83.7	90.6	45.0	49.0	49.0
Georgia	91.5	67.6	68.1	7.8	19.3	45.6
Kazakhstan	95.0	77.5	71.4	88.5	56.4	50.9
Kyrgystan	94.1	81.3	77.0	24.8	50.7	69.9
Moldova	67.1	75.2	72.5	39.0	13.0	38.2
Russia	29.9	38.7	49.1	26.2	28.1	22.4
Tajikistan	100.0	94.7	76.2**	70.7	83.0	84.6**
Turkmenistan	51.7*	43.4	51.5**	70.6*	66.3	66.3**
Uzbekistan	71.8	63.8	67.7	20.4*	49.5	34.6**
Ukraine	39.2*	30.9	32.3	57.7*	57.6	13.3
Simple average	74,3	66,9	67,8	39,9	44,5	48,1

*- 1997. ** -2002

Source: Derived from: 15 Years of the NIS (1991-2005) Statistical Abstract. Moscow, 2006: Borodin (2005)

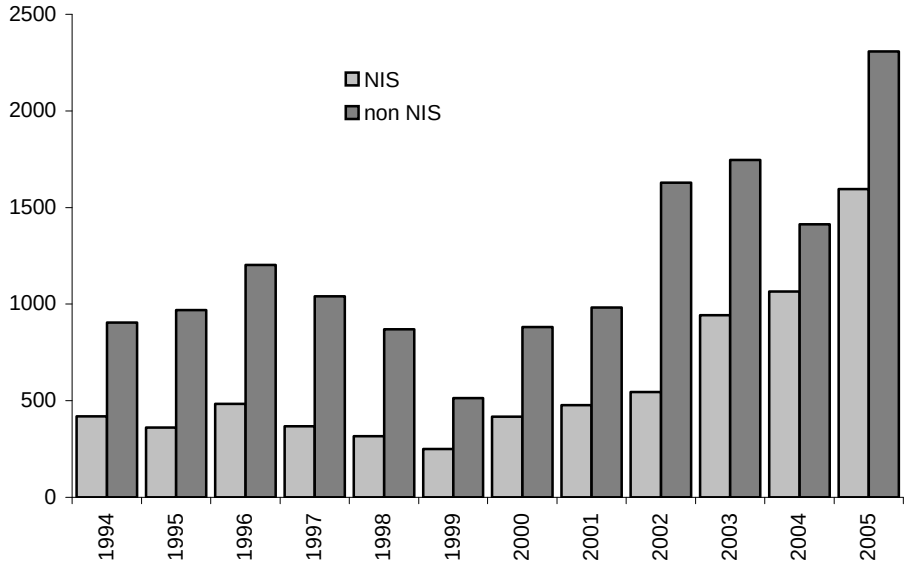
Russia remains the major recipient of NIS's deliveries of agri-food commodities while it has wider trade contacts with non-NIS countries (Figure 3, Figure 4, and Figure 5).

Figure 3. Russia: Agri-food import from NIS and non-NIS countries, million US$



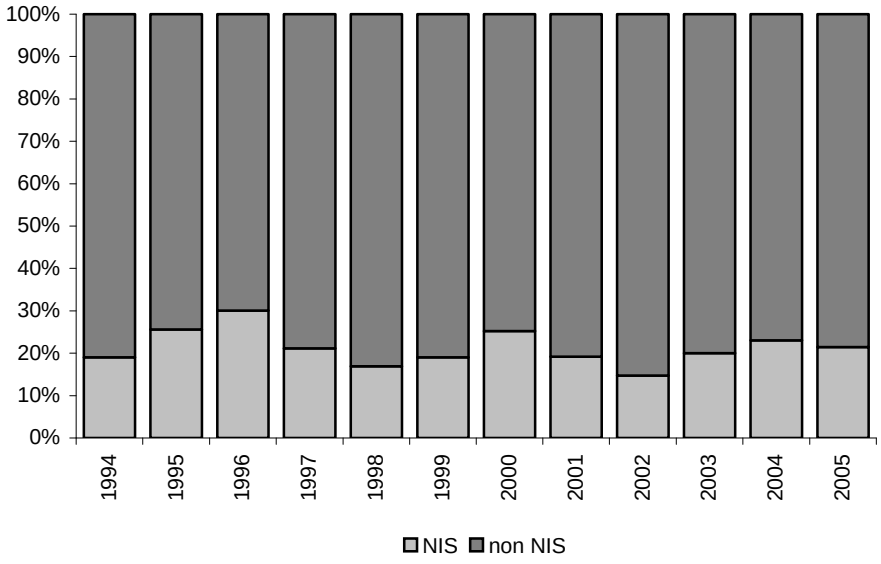
Source: RF Customs Committee data

Figure 4. Russia: Agri-food export to NIS and non-NIS countries, million US$



Source: RF Customs Committee data

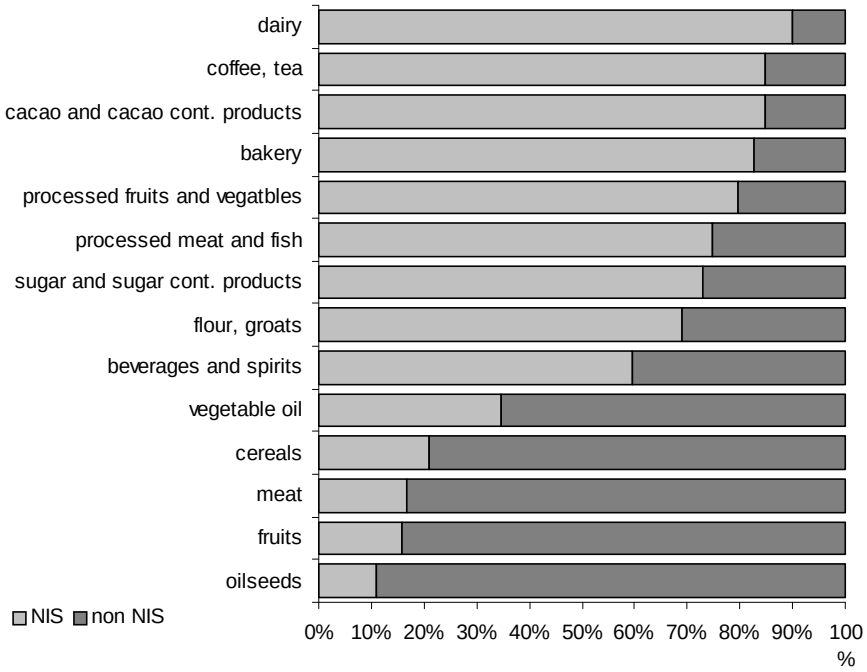
Figure 5. Russia: Agri-food trade with NIS and non-NIS countries, %



Source: Computed from Customs Committee's data

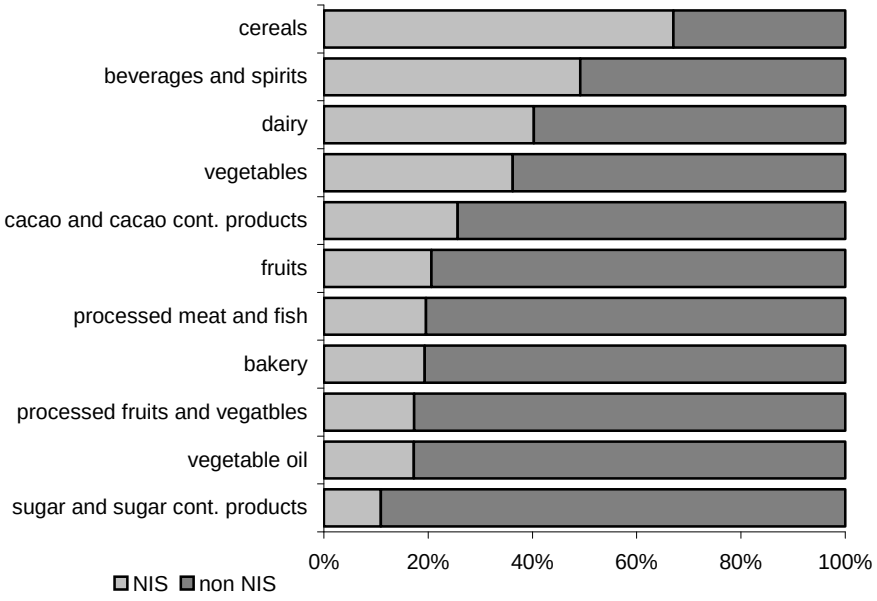
Russian export to the non-NIS countries is represented by raw agricultural commodities while its import from non-NIS countries consists of high value added food commodities. In agri-food trade with NIS countries this ratio is opposite: raw dominates imports and value added commodities dominate exports (Figure 6 and Figure 7).

Figure 6. Russia: Structure of export of selected agri-food commodities by NIS and non NIS countries, 2004, %



Source: Computed from RF Customs Committee's data

Figure 7. Russia: Structure of import of Selected Agri-Food Commodities by NIS and non NIS countries, 2004, %



Source: Computed from RF Customs Committee's data

Trade integration: trade regime

From the very beginning of the establishing of the NIS the constituent countries make efforts to establish also a Common Agricultural Market of these countries. The target of this Common market is declared as a free movement of agri-food commodities and services in

agri-food sector among member countries (Krylatykh, 1998). This assumes not only free trade regime between countries but also consolidated trade regime in regard the third countries. Common market request also unification or at least convergence of the domestic support policies.

In the NIS countries one can observe neither free trade regime nor unified domestic support. In Table 2 the import duties in AVE for selected agri-food commodities are presented in every NIC country. One can see that both level and measures of boarder protection varies significantly from country to country.

Table 2. Trade measures in NIS: import duties for selected commodities, %

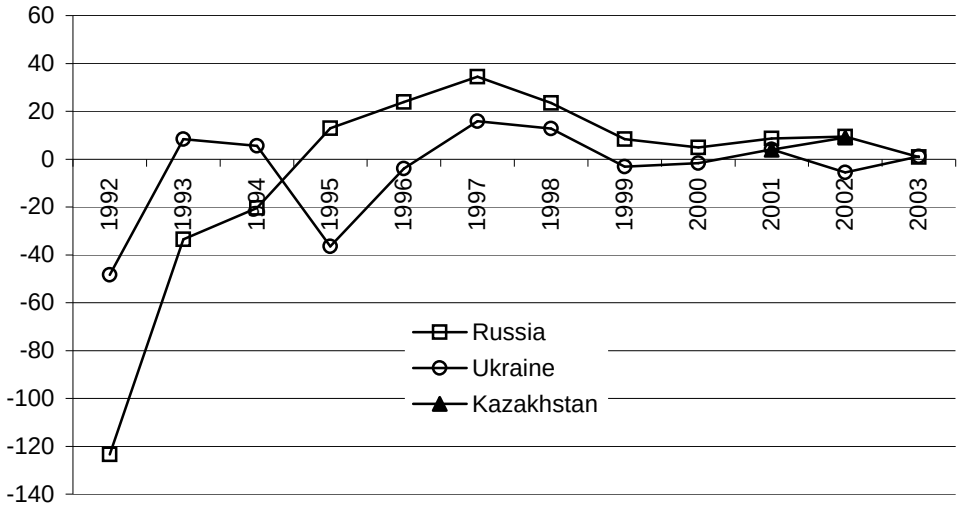
	Reference years	Butter	Poultry, frozen	Cane sugar	Carcasses and halfcarcasses		Other wheat
					beef	pork	
Armenia	2006	10	10	10	10	10	0
Azerbaijan	2005	15	15	15	15	15	0
Belarus	2002	20	30	1	15	15	5
Georgia	2004	10	12	6	12	12	12
Kazakhstan	2004	0	5	0	5	5	5
Kyrgystan	2003	10	10	0	10	10	0
Moldova	2006	20	30	30	20	20	10
Russia	2005	15	25+volume quota	changeable duty	TRQ (15/40)*	TRQ (15/80)*	5
Tajikistan	2002	10	15	5	15	15	5
Turkmenistan	2002	0	0	0	0	0	50
Ukraine	2005	1.5 Euro/kg	10	50	10	10	0
Uzbekistan	2001	0	0	0	0	0	0

In brackets – duty within and beyond TRQ

Source: Derived from UNCTAD data and data of the AFE

Level of the domestic support is difficult to estimate in one measure: the conventional indicator PSE officially is calculated by the OECD only for Russia and for Ukraine. We have done our own calculations of PSE for two years for Kazakhstan. These indicator shows the same trends and moreover, the level in the domestic support of agriculture at lest in these three economies (Figure 8). However, more detail analysis of the domestic measures shows very big discrepancy in this respect (for instance, Serova, 2000).

Figure 8. State support to agriculture in selected NIS countries, %PSE

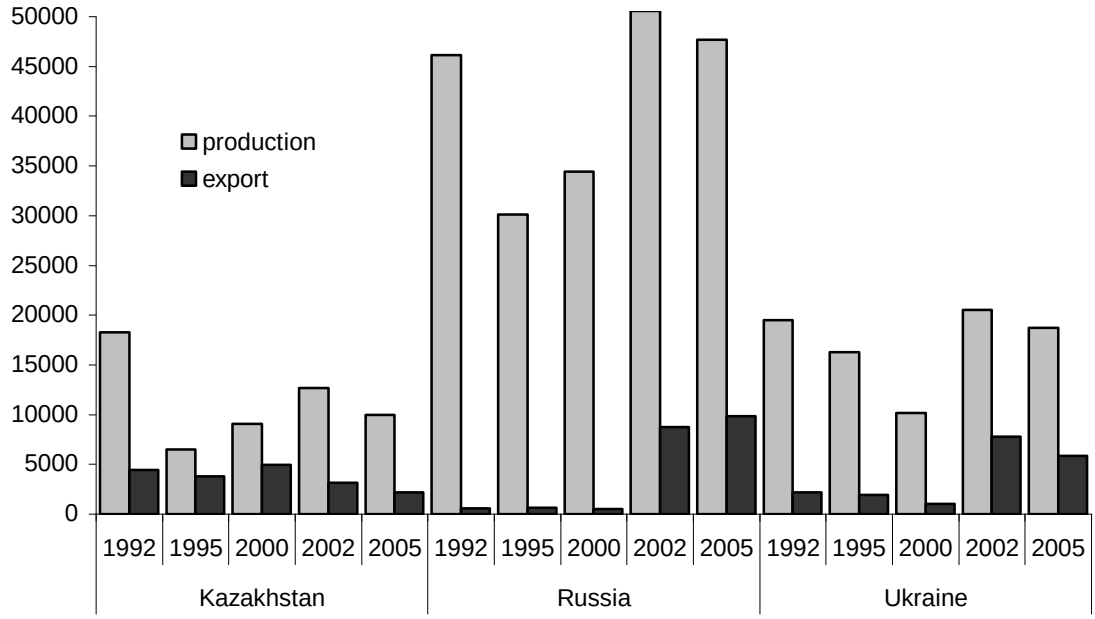


Source: Russia and Ukraine – OECD database, Kazakhstan – AFE

Specialization and cooperation

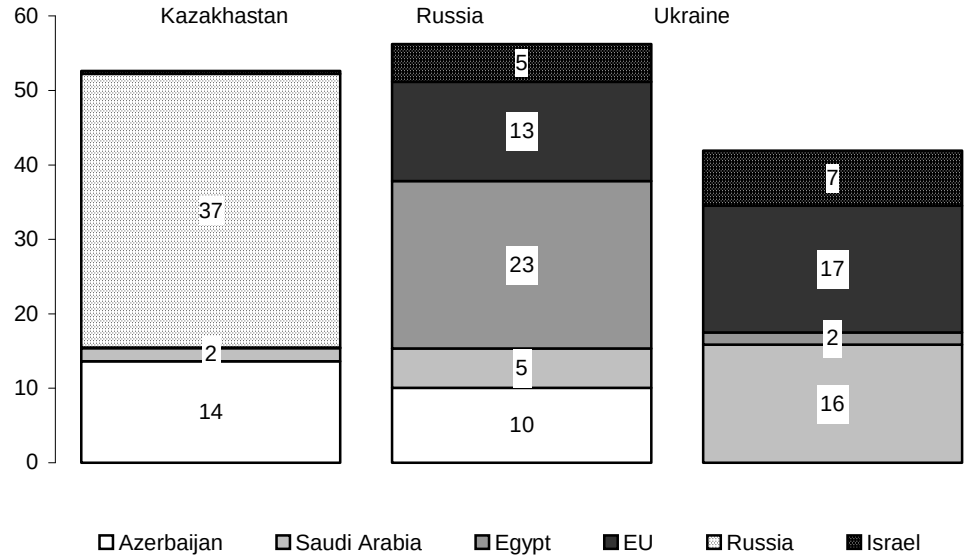
Common agricultural market is very problematic in the NIS also because there are many contradictions between these countries both on the external and internal agri-food markets. Thus, Ukraine, Russia and Kazakhstan are emerging world grain exporters. In 2002-2005, these three countries have exported on average 15-20 million tonnes of wheat a year (Figure 9). However, they face with the severe contradictions between them. Firstly, they are competing at the same markets. Secondly, Ukraine has available the major former Soviet ports on the Black sea and charges Russian exporters fees for an access to these ports. In its turn, Russia imposes higher transportation fees for Kazakhstan grain transit through Russian territory. In result, Kazakhstan has to ship major grain exports to Russia, and Ukraine has advantages in front of Russia on the EU markets (Figure 10). As a consequence of that, all three countries lose from this irrational contest and lack of suggesting cooperation in grain trade.

Figure 9. Grain production and export of selected NIS, million tonnes



Source: Derived from FAO database

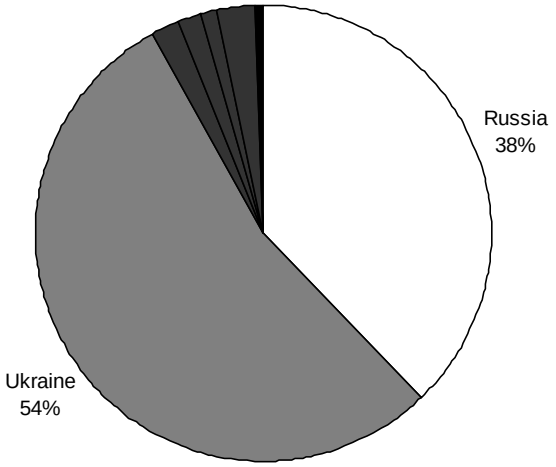
Figure 10. Grain export by countries of selected CIS, 2004, %



Source: AFE

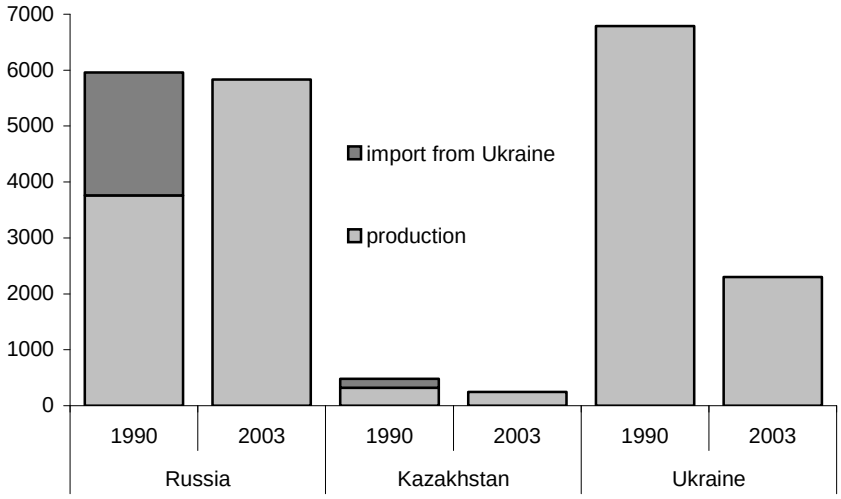
Another example of contradictions between the same three countries occurs in sugar production. In the Soviet time Ukraine was a major white sugar producer and shipped it to Russia and other republics (Figure 11). Russia received half of consumed sugar from Ukraine. Since break-up of the USSR, newly independent states had started to produce themselves white sugar (usually from imported raw sugar), what caused a severe fall in sugar production in Ukraine (Figure 12), and growth in sugar refinery industry in other NIS. This also caused the trade conflicts between some NIS and imposing of trade technical barriers.

Figure 11. USSR: Sugar production by republics in 1986-90, %



Source: Narodnoye Khozyajstvo SSSR. Moscow, Goskomstat. 1990

Figure 12. Sugar trade among selected NIS countries, million tonnes



Source: AFE

In the last years Russia has toughen trade regime for agri-food products originated from other CIS. Thus, there were restrictions for livestock products from Ukraine, Moldavian and Georgian wines and Georgian mineral water were prohibited for import to Russia, Byelorussian sugar imports was done a subject of more serious border control and so forth.

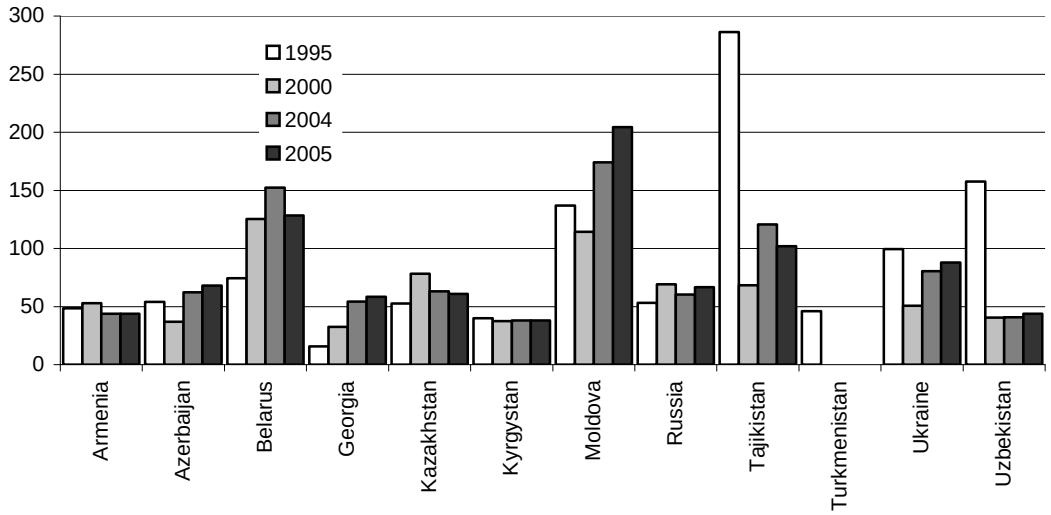
Trade contradictions come out due to non-simultaneous accession to the WTO. New WTO members – CIS countries introduce additional requirements for the accessing neighbors. It was a case, for instance between Kazakhstan and Kyrgystan, Russia and Georgia.

4. Integration to the world economy

The NIS's share in the world agricultural trade is marginal: overall trade makes about 3-4% of the world one and agricultural export – 0.2% of world one.

The openness of the agri-food sectors varies by countries of the region (Figure 13). However, it lack of access to data on gross agricultural output for the countries in consideration we had to calculated the index of openness with value added in agriculture. Therefore these indices measure also the difference in structure of agriculture: countries with higher intermediate consumption in agriculture caeteris paribus will have smaller value added and as a result higher index of openness, calculated as ratio of volume of trade and value added. Nevertheless these indices provide a rough picture of countries divergence in terms of participation in world agri-food trade. Also Figure 13 depicts the fact that there is no similar trends in development of trade openness in the region.

Figure 13. Openness of agri-food sectors in the NIS countries, %*



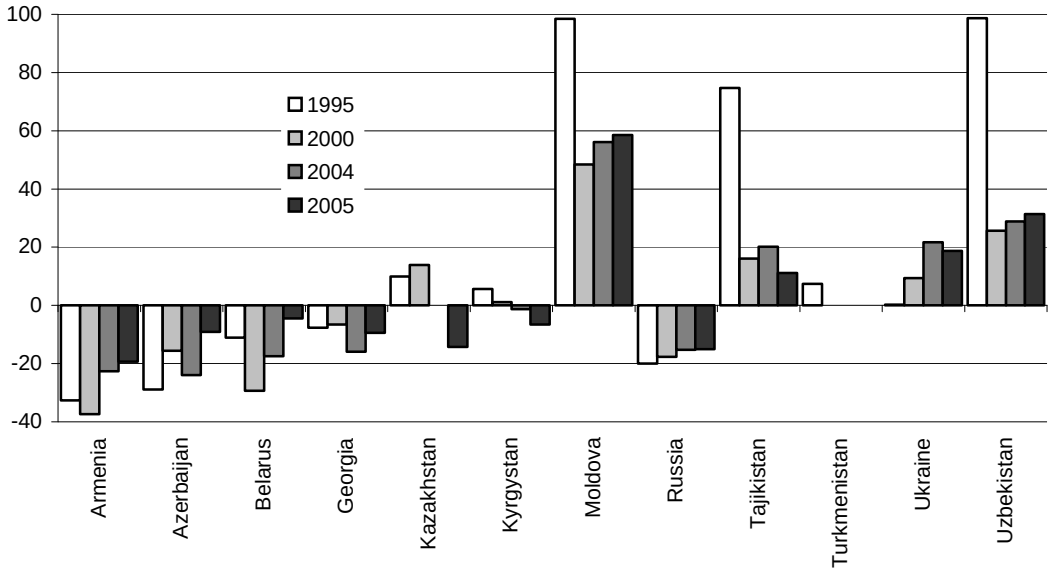
* Calculated as ratio of agri-food export+import to value added in agriculture

Source: Derived from 15 years of the Commonwealth of independent states (1991-2005) Statistical abstracts, UNCTAD database

Dependency of agri-food sectors of the NIS countries was estimated with the same indicator of value added, created in agriculture (Figure 14). With the same limitations tas for indicator of openness this index show us how different countries of the region depend on deliveries or supplies to the external markets. Thus, we see, that Moldova is heavily depending on export. Taking into consideration that almost ¾ of its export goes to the NIS countries (see Table 2) and most of all to Russia, one can imagine how sensitive is Moldavian agri-food sector to any restrictions on trade imposed by Russia.

Majority of the NIS countries depends on imports from the external markets but in the last years the level of this dependency is less than 20%. In terms of gross agricultural output this dependency is even less.

Figure 14. Dependency of agri-food sectors of the NIS countries, %*

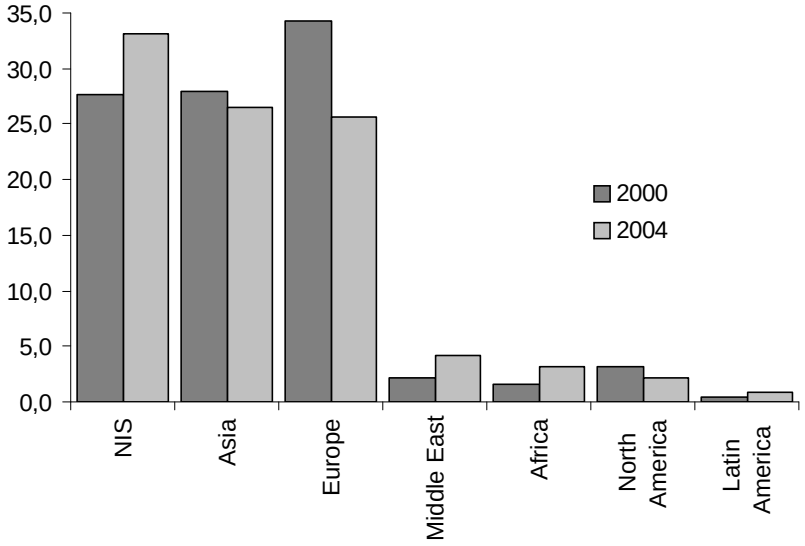


* Calculated as ratio of agri-food export-import to value added in agriculture

Source: Derived from 15 years of the Commonwealth of independent states (1991-2005) Statistical abstracts, UNCTAD database

The next Figure depicts the structure of agricultural export of the NIS countries by regions. NIS countries export mostly within the region, to Asia and to Europe. In the last years exports inside the region are slightly increased at expense of Asia and Europe. Geographical structure of export is for sure determined by location of the region – between Europe and Asia. However, it reflects either the structure of agri-food production by the NIS countries: law quality and low compliance with international standards of average level agri-food products produced in the region result in exportation to the developed countries only low value added raw agricultural commodities. High value products are dedicated mostly for the intra-regional trade.

Figure 15. NIS agricultural exports by regions, %



Source: WTO. International Trade statistics. 2005

Integration to th world markets is closely linked with accession to the WTO. In this respect situation differs significantly across the region: different countries applied for accession in different time (Turkmenistan refrains to apply by now), therefore they are at different level of accession process (Table 3).

Table 3. WTO accession process of the NIS countries

Country	Application received	First meeting of Working Party	Latest meeting of Working Party	Status
Armenia	November 1993	January 1996	-	Membership since 5 February 2003
Azerbaijan	June 1997	June 2002	March 2006	Bilateral negotiations on market access are underway
Belarus	September 1993	June 1997	May 2005	Working Party continues the examination of Belarus' foreign trade regime
Georgia	July 1996	March 1998	-	Membership since 14 June 2000
Kazakhstan	January 1996	March 1997	November 2006	Bilateral market access negotiations are underway on the basis of revised offers in goods and services circulated in 2004
Kyrgystan	February 1996	March 1997	-	Membership since 20 December 1998
Moldova	November 1993	June 1997	-	Membership since 26 July 2001
Russia	June 1993	July 1995	March 2006	Market access negotiations on goods and services are ongoing
Tajikistan	May 2001	March 2004	October 2006	The Working Party continues the examination of Tajikistan's foreign trade regime

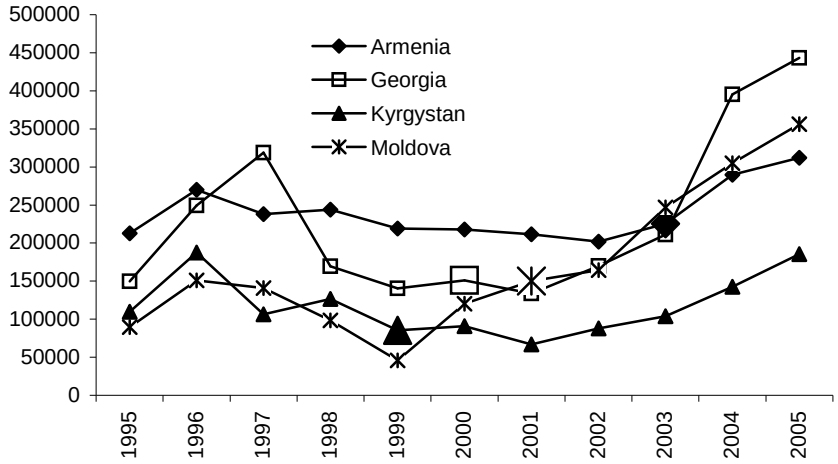
Turkmenistan	Has not applied			
Ukraine	November 1993	February 1995	June 2006	Bilateral market access negotiations are ongoing
Uzbekistan	December 1994	July 2002	October 2005	Bilateral market access negotiations are ongoing

Source: WTO database

Some of the countries are already the members of the WTO (Moldova, Armenia, Georgia, Kyrgystan) and have very tough commitments. The accessed countries are small economies and there accession had not change significantly the status quo in the WTO. The negotiation with such big economies like Russia, Ukraine and Kazakhstan could not be an easy process.

Also it is worth to note that accessed countries committed rather high level of openness of the internal markets: after accession in all four countries the agri-food imports notably increased (**Hiba! Érvénytelen könyvjelző-hivatkozás.**).

Figure 16. Impact of accession to WTO on import in selected NIS countries*



Enlarged mark on each country's line indicates the year of accession. For Kyrgystan it is indicated 1998 because the official date of accession was late December of 1997.

Source: Derived from UNCTAD database

5. Intra-industry trade

The modern trade theory point out that increase of trade can be determined by the growth in product variety. Helpman in 1987 had found empirical evidence that growth in products variety increases intra-industry trade (ITT). Transitional countries and especially NIS countries have an evident technological gap, which does not allow them to differentiate agri-food products in order to increase their export to developed countries at expanse of this factor. The export to the developed countries can grow but it can be a result of extensive margin: when expansion of export is because of larger volume of larger set of products is imported on the contrary with intensive margin when expansion of export is because of growth in quality and prices (Kandogan, 2003; Hummels and Klenow,2002).

In the majority of empirical studies for ITT measurement is used GL_i index, proposed by Grubel and Lloyd (Grubel and Lloyd, 1975):

$$GL_i = \frac{[(X_i + M_i) - |X_i - M_i|}{X_i + M_i} * 100 = (1 - \frac{|X_i - M_i|}{X_i + M_i}) * 100;$$

where X_i – export of product *i*, M_i - import of product *i.*

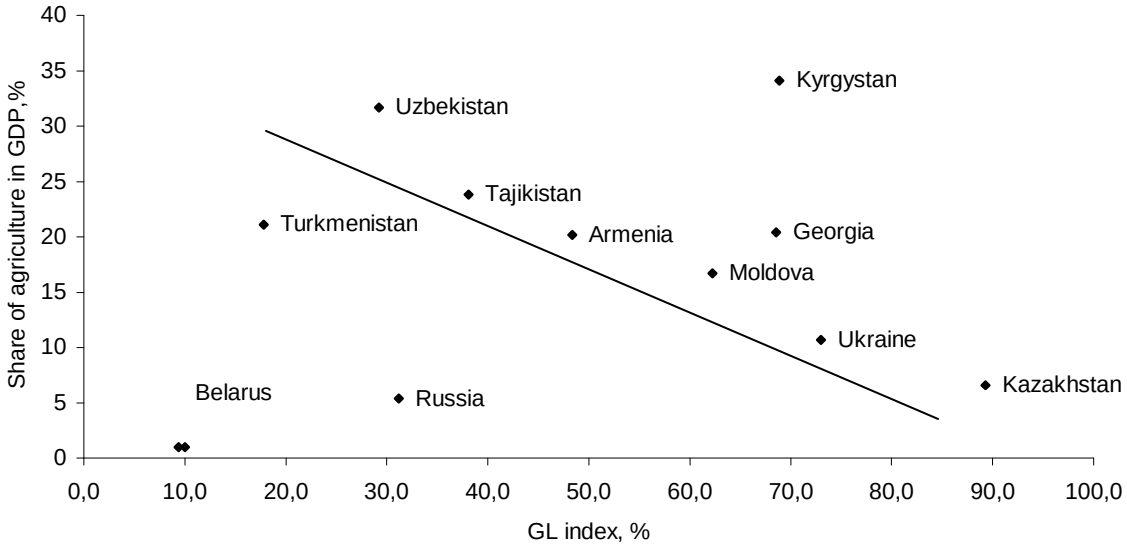
Thus, the *GL* index measures the exchange of the commodities of the same group: Russian sausages to Kazakhstan sausages, Russian cereals to Ukrainian cereals. The more varieties of the same product are produced inside the country the more options for international trade with this product is case of satisfied quality of all varieties.

We computed *GL* indices for all NIS countries for the agri-food commodities (SITC 1-24). In 1995-2005 for 12 countries this index varies from 4.6 to 88%. It was natural to reveal the factors, which determine this changeability of GL index.

Level of the IIT presumably depends most of all on level of the economy development: more industrialized economies has more technological possibilities for increase in product varieties while less developed economy. In a given accessibility of statistic data we picked up two proxies for estimation of country development level: a share of agriculture in GDP indicating the level of industrialization of the economy; and GDP per capita estimating living standards in the country. The results of the correlation analysis are shown in Figure 17 and Figure 18.

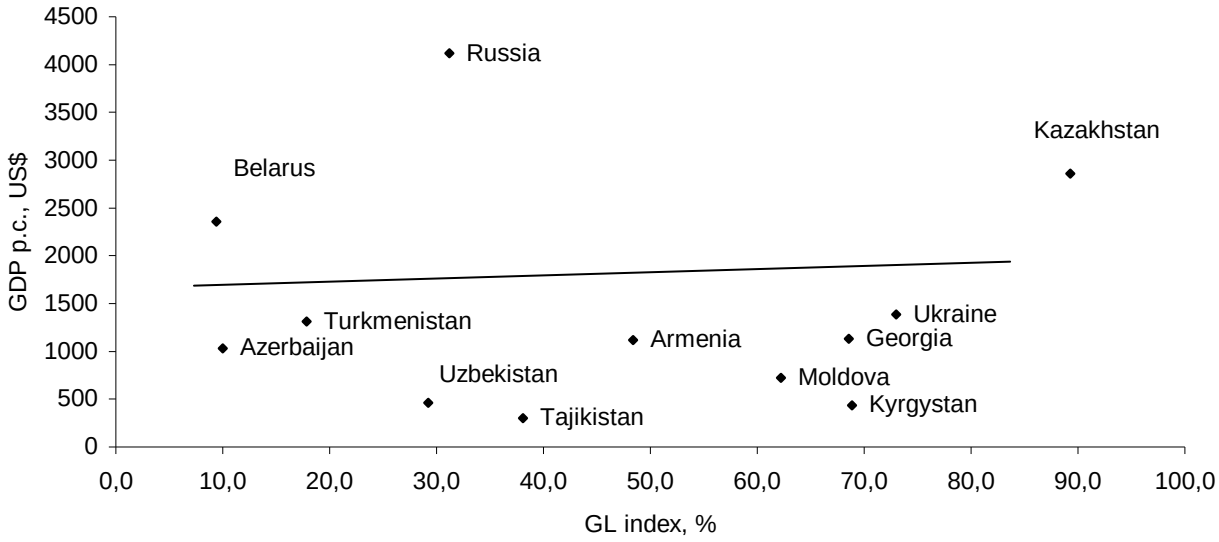
It is clear that level of industrialization affect GL index more significantly those living standards in the NIS countries. However, correlation coefficient in both cases are statistically insignificant.

Figure 17. Correlation between Intra-industry Trade (*GL index*) and share of agriculture in the GDP in the NIS countries



Source: Derived from 15 years of the Commonwealth of independent states (1991-2005) Statistical abstracts, UNCTAD database

Figure 18. Correlation between Intra-industry Trade (*GL index*) and share of agriculture in the GDP in the NIS countries



Source: Derived from 15 years of the Commonwealth of independent states (1991-2005) Statistical abstracts, UNCTAD database

But we considered all agri-food commodities as a single aggregate. At the same time it is clear that agricultural raw products are least subject for differentiation than food commodities. Therefore we split agri-food aggregate into to group of commodities – raw (SITC 2 - 22 - 27 – 28) and food (SITC 0 + 1 + 22 + 4). And built two regressions where *GL* for corresponding group of commodities was a depending parameter and share of agriculture in GDP and GDP per capita were the variables. The parameters of the regression are presented in the Table 4 and Table 5.

Regression analysis showed that level of industrialization of the economy is a rather strong factor affecting intra-industry trade with agricultural raw commodities in the NIS countries. For food commodities level of industrialization does not influence very much. Living standards of the country do not determine *GL* in a big extent in both cases. .

Table 4. Parameters for regression function of GL index for agricultural raw commodities with variables "Share of agriculture in GDP" and "GDP per capita", NIS countries, 1995-2005

	Coefficients	*Std. error*	*t-stat*	*P-value*	*Lower 95%*	*Upper 95%*
Y-intersection	162,66	30,51	5,33	0,00	93,65	231,67
Share	-3,84	1,08	-3,57	0,01	-6,27	-1,41
GDP	-0,02	0,01	-2,65	0,03	-0,04	0,00
R-square 0,59						

Table 5 Parameters for regression function of GL index for food commodities with variables "Share of agriculture in GDP" and "GDP per capita" ", NIS countries, 1995-2005

	Coefficients	*Std. error*	*t-stat*	*P-value*	*Lower 95%*	*Upper 95%*

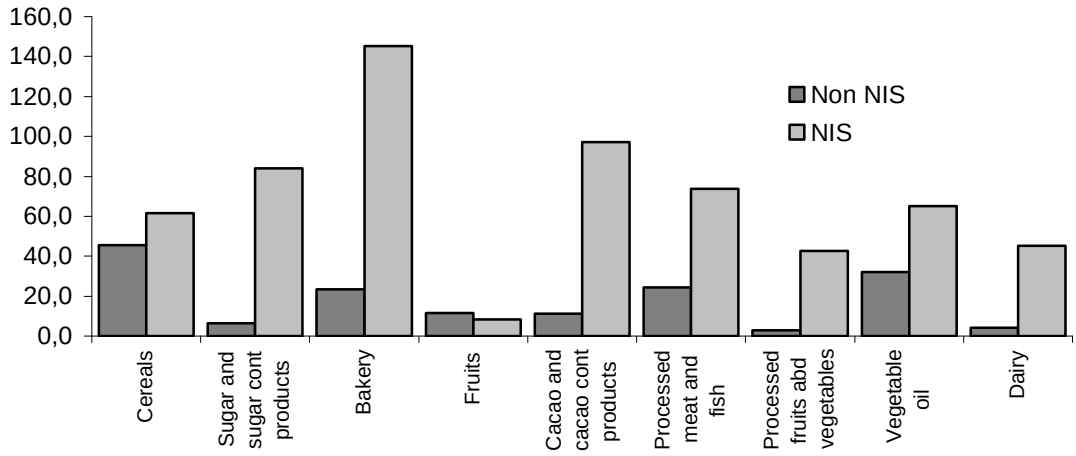
Y-intersection	109,43	33,31	3,29	0,01	34,09	184,77
Share	-1,78	1,17	-1,51	0,16	-4,43	0,88
GDP	-0,01	0,01	-1,24	0,25	-0,03	0,01
R-square 0,20						

So, our analysis does not allow answering what determines intra-industry food trade in the NIS countries. But what we revealed is the following: the more industrialized countries have more differentiated agricultural raw production, while less developed countries have more monocrop structure of farming and presumably inclined to self-sufficiency in raw.

The last issue we studied was the difference in intra-industry trade within NIS and beyond NIS (Figure 19-Figure 21). Intra-agrifood sector trade in the region is quite high in comparison with general IIT for this countries: GL indices for NIS countries computed by Kandogan for 1995-1999 is below 56% while for major groups of agricultural products is above that level (for three considered countries).

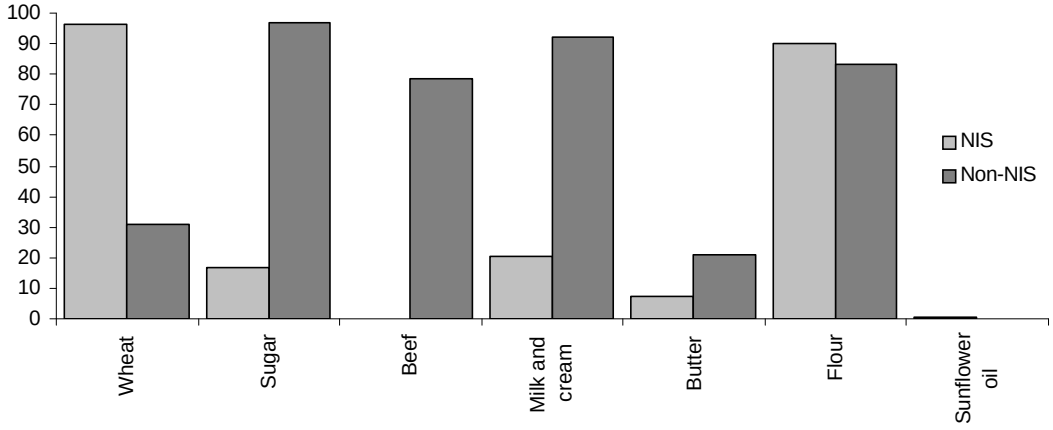
Russia is seemingly differs from the rest of NIS countries (at least two other big economies of the region): for Russia intra-agri-food sector trade is much more developed with NIS countries than with the rest of the world. It can be explained with already stated position of Russia as distribution point for deliveries of agri-food commodities from non-NIS countries to the NIS countries. It can be direct re-export or Russian companies can add value to those commodities and export them further to other countries of the region. Other NIS countries have less intra-agri-foood sector trade with NIS countries possibly due to the continuing specialization in certain products which remained from the Soviet time. Technological underdevelopment does not allow increasing product variety.

Figure 19. Russia: Intra-industry Trade (*GL* index) for selected agri-food commodities in trade with NIS and with non-NIS countries, 2004, %



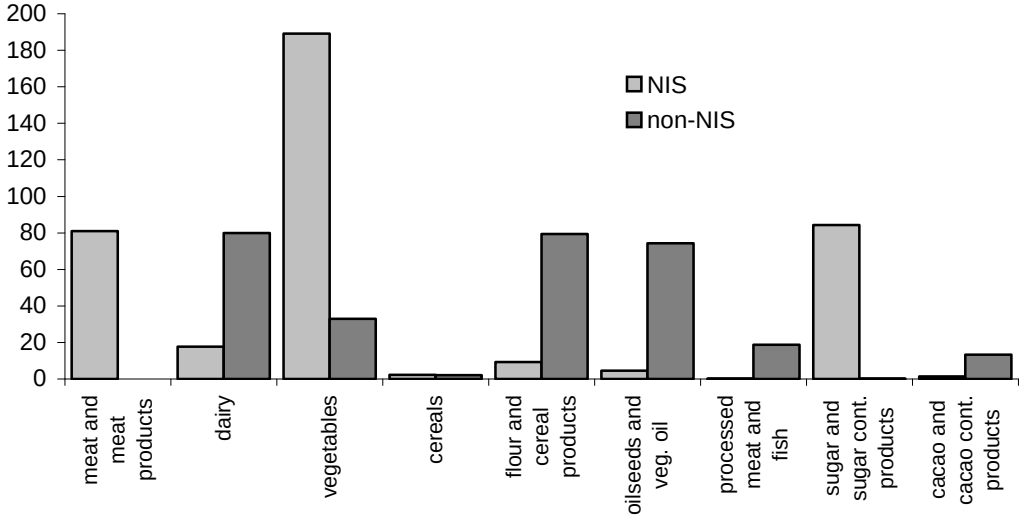
Source: derived from AFE database

Figure 20. Ukraine: Intra-industry Trade (*GL* index) for selected agri-food commodities in trade with NIS and with non-NIS countries, 2004, %



Source: derived from AFE database

Figure 21. Kazakhstan: Intra-industry Trade (*GL* index) for selected agri-food commodities in trade with NIS and with non-NIS countries, 2003, %



Source: derived from AFE database

6. Conclusions

Answering the question raised in the beginning of this paper after conducting this study we incline to state that international integration is more attractive for the NIS countries and will deepened further along with positive development trend. Nevertheless the technological gap and inherited from the Soviet period specialization of agri-food sectors (sometimes with *reductio ad* monocrop farming) push this countries to inter-regional agri-food trade despite of trade barriers and failure of establishing common agricultural market of the NIS.

This trend will be supported by uneven development of the NIS countries. More advanced in modernization economy as a whole and agri-food sector countries will get more

investment inflows and nhi-tech for their agri-ffod sectors. This will cause product variety expansion and growth in trade with world. It can be also a way for trade with intensive margin/ Countries which will lag behind this development progress can remain in the status of suppliers of the primary agricultural raw and the markets for deliveries of high value added products. The last trend can be stipulated by low living standards of population.

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