EXPORT MARGINS IN SOUTHERN CAUCASUS AND CENTRAL ASIAN COUNTRIES` AGRARIAN SECTOR EXPORT GROWTH TO RUSSIA MARKET

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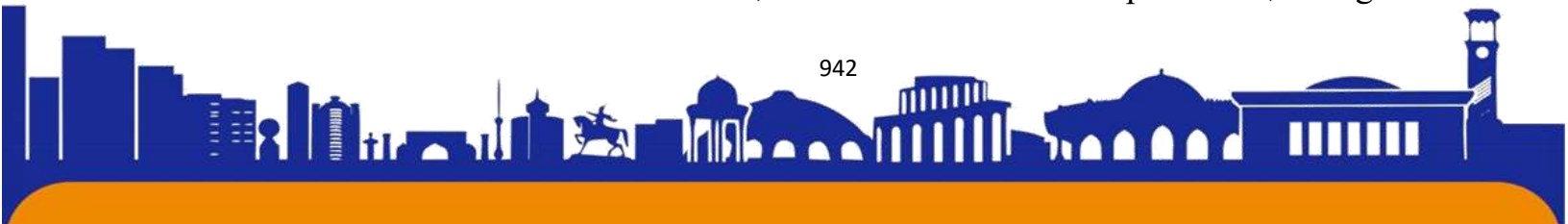*(shavkat175@gmail.com)*

Abstract

The present paper deals with the study of agricultural products export growth of South Caucasus and Central Asian (CCA) countries to Russia. We decomposed these countries` agricultural product exports growth into extensive and intensive margins and further intensive margin decomposed into price and quantity components.

The results of our studies showed the growth of agrarian sector export growth mainly based on intensive margin growth during the 2002-2015 period. Nevertheless, the growth of agrarian export by extensive margin was significant for most CCA countries (except Kazakhstan and Turkmenistan) during the 2014-2015. Further decomposition of intensive margin into price and quantity components showed that Azerbaijan, in 2015 exported higher price level agricultural products than in 2002. For other CCA countries, contribution of price margin was not significant during 2002-2015. Our result showed significant contribution quantity margin in growth of export of agrarian sector for most CCA countries (except Turkmenistan), especially for Uzbekistan, Kazakhstan and Armenia during 2014-2015

Key words: *Agrarian sector, Export growth, Extensive margin, Intensive margin, CCA countries.*

Data

We draw export data from UN Comtrade database in the HS-2002 at 6-digits level. Comtrade database have not trade data for some CA countries, therefore, instead of export from South Caucasia and Central Asia (CCA) countries to Russia, we used import data of Russia from these countries. We identify as export of agricultural sector the commodities of three sections, "Animal and animal products", "Vegetable

products" and "Animal or vegetable fats, oils and waxes" (Chapters from 01 to 15 at 2-digits level). We used data covering period from 2002 to 2015.

Methodology

To decompose the export growth into extensive and intensive margins we used so-called count method. There extensive margin is defined as the number of exported products and destinations, the intensive margin is defined as the volume of trade per product. Intensive margin further decomposed into price and quantity components. Our decomposition methodology similar to approach of count method used by Turckan (2014) (see Turckan, 2014 for more details)
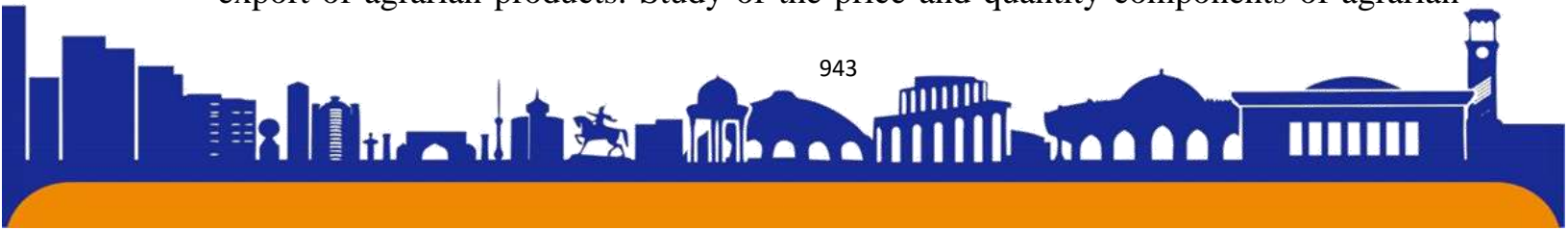
Main results and conclusions

The most of the CCA countries, (excepting Tajikistan and Kyrgyzstan) increased significantly export value to Russia during 2002-2015. As for agricultural products, export had negative growth rate for three countries (Tajikistan, Turkmenistan and Uzbekistan). Agrarian sector export growth vary highly across various episodes between 2002 and 2015. All countries agrarian sector showed positive export growth during the 2002-2008, but during 2008-2009 the growth exports of agricultural products was observed only for 3 countries (Armenia, Tajikistan and Uzbekistan), during 2009-2014, for four countries (SC countries and Kazakhstan), and finally, during 2014-2015 for four countries (Tajikistan, Kyrgyzstan, Uzbekistan and Georgia).

The results of decomposition of export growth are presented in Table 1. For each four period we showed growth of extensive margin, growth of price and quantity components of intensive margins. Our results showed that export growth of agricultural products from CCA countries to Russia mainly based on intensive margin rather to extensive margin.

Moreover, for all the Middle Asian countries, the growth rate of extensive margin was negative. Its mean that these countries in 2015 exported less types of agricultural products (at HS 6-digit level) than in 2002. Azerbaijan, Georgia and Kazakhstan extensive margin growth rate during this period was positive, nevertheless, its rate was less than growth rate of intensive margin.

Only for Armenia, results showed importance of extensive margin in growth of export of agrarian products. Study of the price and quantity components of agrarian

products export growth showed that during 2002-2015 price component had significant contribution in export growth of Armenia. If to assume that growth of price margin means the growth of quality Armenia increased quality of exported agricultural products during this period (exported higher prices level agrarian products). Significant agrarian sector export growth by extensive margin and quantity margin the most of CCA countries showed during 2014-2015. Therefore, Russia's restrictions on imports of agricultural products (from some countries) had positive impact of export growth of agrarian sector of CCA countries.

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	2002/2008			2008/2009			2009/2014			2014/2015			2002-2015		
	g_EM	G_p	G_q	g_EM	G_p	G_q	g_EM	G_p	G_q	g_EM	G_p	G_q	g_EM	G_p	G_q
AZE	4.91	2.94	8.30	0.00	-0.38	-0.69	-3.41	5.04	0.01	16.22	-3.05	6.80	2.06	5.64	9.74
ARM	1.84	0.05	0.43	13.79	0.04	0.47	15.56	0.37	4.08	10.29	-1.89	27.74	8.49	0.13	2.91
GEO	-8.42	0.18	0.09	-34.78	0.07	0.27	16.36	0.02	1.48	31.25	-0.28	6.55	0.57	0.40	0.88
KAZ	-2.89	6.00	7.92	12.82	-4.90	0.58	14.48	0.73	9.73	-10.98	-1.75	69.29	3.96	1.39	3.55
KGZ	-2.67	3.96	24.25	3.92	-3.29	2.19	-13.95	0.10	-0.04	36.00	-0.28	4.69	-4.28	0.17	0.18
TJK	0.00	1.69	1.39	0.00	-3.73	6.42	-18.10	0.01	-0.12	33.33	-0.08	12.66	-5.32	0.03	-0.04
TKM	0.00	0.00	0.07	7.69	-0.02	0.01	-15.59	-0.00	-0.01	-16.67	-0.01	-0.01	-7.09	0.00	0.00
UZB	-1.87	2.52	3.96	-5.33	-0.13	56.86	-3.96	0.48	-0.83	13.79	8.51	104.25	-1.84	0.16	0.20

Table 1. The growth rates of extensive margin, price and quantity margins of the CCA countries agrarian sectors export (2002-2015)

Note: g_EM – average annual growth rate of extensive margin, G_p, G_q– average annual growth rate of price and quantity components. To calculate the growth rate we used the compound annual growth rates formula.

Source: Authors' own calculations based on UN Comtrade database at the 6-digit level of HS-2002.