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Risks to the agri-food sector of Republic of Moldova associated with restrictions imposed by the Russian Federation on Moldovan imports

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Abstract

After Republic of Moldova has declared its firm decision to sign the Association Agreement with the European Union, Russia has tightened Moldovan products' access on its market. It has imposed a series of bans on Moldovan agri-food imports starting with the end of last year – wines (September 2013), pork meat (April 2014), fresh and canned fruits and vegetables (July 2014), all kinds of meat (October 2014). On July 31, a resolution on the introduction of import duties in respect of imported products whose country of origin is the Republic of Moldova, especially beef, pork, chicken, vegetables, some fruits, cereals, sugar, wine grapes, alcohol, and furniture has been adopted. This situation increases tension among domestic farmers and food producers and sparks concerns among decision makers, due to the high concentration of some of these products on the Russian market. The present paper aims to offer: an alternative vision on the effects these measures may have on different segments of the Moldovan agri-food sector; some attempts to estimate losses in revenue from exports in the most exposed to risk sectors. Some recommendations of measure to overcome the possible negative effects have been formulated. Despite the existence of trade preferential regime between CIS countries since the early 90s of the past century, nontariff barriers remain to be a major impediment to trade among them. Particularly severe are trade embargoes applied by Russia Federation. Although, the experience showed that some of these measures have strong negative impact, other effects appear to be sometimes overstated. This does motivate Russian authorities to use them as a leverage to solve non-economic disagreements, maintaining the dependence of the country and hindering its initiative to promote proper policies to develop its national competitiveness.

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1. Generic notions about databases

Since the end of last year, Russian Federation imposed a series of bans on imports of several Moldovan agri-food products. Last autumn the imports of Moldovan wines were banned, in April 2014 pork meat, in July 2014 the imports of both fresh and canned fruits and vegetables and in October the imports of all kinds of meat. According to Rospotrebnadzor, Russian sanitary authority, “the ban for wines has been imposed because Republic of Moldova had consistently failed to improve the quality of its products” (Reuters, 2013). For other products the main argument was the same.

Such a scenario could be predicted since last year; the first warnings were voiced in this respect by the Russian authorities after Republic of Moldova has ratified the Association Agreement with the EU. This kind of situations occurs often between some of CIS countries and Russia Federation, despite the bilateral and multilateral free trade agreements that exist among them. A similar situation occurred in 2006, when Russian Federal Rospotrebnadzor, imposed a ban on wine imports from Moldova and Georgia. It cited health reasons and claimed that the wines contained pesticides and heavy metals (Hedenskog, R. L. Larsson; 2007). The embargo caused a 47% fall in the volume of grape wine production in 2006 compared to 2005 year that never recovered till present (a decrease in grape wine production from 36.3 mln dal to 19.3 mln dal). In the corresponding period, grape wine exports value decreased from USD 278 mln to almost USD 161.1 mln, while its share in total exports fell down from a fourth to nearly 15%. Some winemakers became insolvent in the following years; others continue to face serious financial constraints even today.

We assume than the negative impact of the Russian embargoes imposed in 2013 and 2014 on the national economy are to some extent overestimated. Some sectors highly concentrated on the Russian market will be severely affected – lower revenues from exports will be received, farmers will be exposed to higher liquidity risk, lower capacity to repay debts, to get new credits and to make investments etc. The main purpose of the paper is to make an assessment of sectors that are most exposed to risk.

Literature review and methods. There exists some recent works on this topic. Recently there were elaborated a study focusing on the analysis of the impact of the Russian sanctions to Moldovan exports on the economy development and a study analysing the potential alternative markets for banned exports.

According to Jörg Radek (2014), the direct losses that may result from Russian sanctions in 2014 by large group of products (wines and spirits, meat, fruits and canned fruits, 19 products for which import tariffs were raised) was estimated at USD 145 m per year, equivalent to 25% of Moldovan exports to Russia and to about 2% of Moldovan GDP.

In the work of Morcotilo I., Lupusor A. (2014) products that were restricted or that are liable for embargo were analyzed from the perspective of their share in the exports to the Russian Federation, the share of imports of that product on potential markets, the tariff levels, as well as the Revealed Comparative Advantage Index (RCA) for each country in view to identify the most optimal export destinations.

The authors of this study have focused, first of all, on identifying the sectors that are most exposed to risk. In depth analysis of statistical data delivered by the National Bureau of Statistics was made in this regard, by calculating the following indicators that have been considered important: value of food exports disaggregated at 4 digit-level according to SITC classification and their share in total exports; trade balance of each product group; the share of exports of each category of product delivered to Russia Federation; contribution of exports to the Russia Federation by categories of products to total exports structure; the share of re-exports in total exports of each category of product delivered to Russia Federation.

Further, using trend analysis losses from the ban of the most sensitive product groups were estimated for the 2014 year.

The results of author’s calculations may be useful in the decision making process of relevant authorities to elaborate a plan of actions to help these sectors on short term. While for some sectors, the highest risk doesn’t come from imposed embargoes but from critical internal constraints: old production technologies, low skilled labor, bad organization of the agricultural land, low performing physical and quality infrastructure etc.

2. Results and discussions

General profile of Moldovan trade with agri-food products. Agriculture has an important role for many economies, even for the developed ones: to ensure the countries’ food security, to provide rural population with employment opportunities, and therefore to reduce poverty etc. In the case of the Republic of Moldova, though, the discrepancy between the growth of the agricultural sector and economic growth increases progressively, which has been determined by the major contribution of the services sector to GDP formation and growth, the contribution of agriculture to GVA (gross value added) formation remains significant compared to that of other countries in the region (about 15% of the GVA or 12.5% of the GDP in 2013). Respectively, 29.5% of the GVA in industry is created by the companies that process agricultural products, including beverages. Agri-food sector represents about 41.2% of the total value of Moldovan exports in goods, while in the structure of the exports of locally made products this indicator is even higher, reaching 57.7% (figure 1).



Fig. 1. Contribution of agri-food sector to the GVA and Moldovan exports, 2013

Source: Elaborated by the authors based on National Bureau of Statistics data

How does trade barriers imposed by Russia Federation to Moldovan agricultural products impact Moldovan exports

According to the data of the previous year, which is a relevant year from the perspective of analyses and comparisons for the agriculture sector output (given the high agricultural production volume obtained), the total

value of exports of agri-food products were USD 987.9 mln, including USD 37.2 mln - live animals and animal products, USD 550.9 mln – plant products and USD 399.9 mln – processed food products. Thus, agri-food exports, last year, were formed predominantly from unprocessed cereals, fruits and vegetables (mainly sunflower seeds, walnuts, wheat, corn, barley, apples). About 40% were exports of processed food products and beverages (mainly grapes wine, ethyl alcohol, fruits juice and sugar) and a very small share of about 4% were products of animal origin (Table 1).

Almost 19.9% of the agri-food products exported from the Republic of Moldova go to Russian market - 53.7% of products of animal origin, 18.9% of plant products and 18.2% of processed food products. Although, Russia is the main market, for perishable products exported by Republic of Moldova – meat, vegetables, and fruits, the share of some of these products reaching 100% - beef meat (100%), carrots, turnips, red beet (99,8%), fresh or chilled cucumbers (100%), fresh apples, pears and quinces (91%).

Table 1. The share of exports of agri-food products to the Russian Federation in the structure of total exports

Name of product category	Total exports, mln USD		Total exports' structure, %	Share of exports to the Russian Federation of the main categories of products in the total value of Moldovan exports, %
		Including the Russian Federation, mln USD (%)		
Total exports	2,399.0	632.0 (26.3%)	100.0	$632.0/2,399*100=26.3$
Agri-food products	987.9	197.1 (19.9%)	41.2	$197.1/2,399*100=8.2$
Live animals and	37.2	20 (53.7%)	1.5	$20/2,399*100=0.8$
Plant products	550.9	104.2 (18.9%)	23.0	$104.2/2399*100=4.3$
Food products	399.9	72.9 (18.2%)	16.7	$72.9/2399*100=3.0$

Source: Authors' calculations based on UN Comtrade data

Russian bans on Moldovan exports since 2013. At present, in spite of the preferential trade regime that Republic of Moldova has with the Russian Federation, imports of a range of agri-food products from Republic of Moldova were banned by Russia – wines (September 2014), pork meat (April), fresh and canned fruits and vegetables (July 2014), all kinds of meat (October 2014). On 31 July, the Russian Federation Governmental Decree on enforcing import customs duties for imported products whose country of origin is the Republic of Moldova has been approved. The decree entered into force on 31 August and establishes customs tariffs for a set of products that, in a great measure, have a high degree of concentration on Russian market: beef, pork, poultry meat, vegetables, some fruits, cereals, sugar, and wine from fresh grapes, ethyl alcohol and furniture (Постановление правительства Российской Федерации от 31 июля 2014 г. N 736). So, what does mean these measures for Moldovan farmers and national authorities?

Sectors more likely to be exposed to risk. Despite its high contribution to GDP formation, the sector showed a high volatility last years, linked to changes in climate conditions. According to the World Bank statistic data, the agriculture value added per worker in republic of Moldova is one of the smallest compared to other countries in the region (World Bank; August 2014). The prevalence of small farmers and the low level of their association, limit investments in the sector and utilization of modern production technologies, and determine their reduced market power influence etc. Thus, there are many points of view to interpret the effects of the trade barriers applied by Russia to Moldovan goods on the sector. They may cause high losses for some farmers, but may be an impulse to new reforms to create a competitive food sector.

In case all food products access to Russia market were banned, and no alternative markets will be found for them, according to last year data the losses of revenues from exports could reach almost 200 mln USD. But the scenarios are to different, and the effects of exports ban may vary on different sectors of the economy. Thus, at this stage, the research has focused on identifying the production sectors that will be most affected.

According to our findings exports of food products to Russia with the highest concentration on the market, a high contribution to total exports formation, and with a large content of inland produced products are: fruits, predominantly apples, wines and beef meat.

Fruits exports. Republic of Moldova is a net exporter of fruits, including in relations with Russia. In 2013, the gross exports of fruits were 204 mln USD, almost 166 mln USD exports of Moldovan origin, representing 80% of total fruits exports. Gross exports of fruits to Russia represented almost 89,5 mil USD (43,9% of total fruits exports), although excluding re-exports the value was about 62,4 mln USD. We export to Russia grapes, apricots, cherries, peaches although; the quantities are not so high. Exports of fruits to this destination are made predominantly from the deliveries of apples witch Moldova produces in high quantities, the farmers growing this kind of fruits being exposed to the highest risk.

Table 2. The exports of fruits to the Russian Federation (excluding re-exports)

	Total export of fruits			Grapes			Apples, pears, quinces			Apricots, cherries, peaches		
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Russia	66,6	53,7	62,4	8,4	8,4	8,8	50,9	36,4	42,7	6,2	7,7	8,4
Other countries	77,6	104,0	103,4	3,4	3,5	4,4	5,1	2,6	4,3	2,8	1,7	4,6

Source: UN Comtrade data

In short time the farmers will feel the effects of embargo, as at the moment the country have a poor storage and processing infrastructure. As showed in a recent study, there are alternative markets for these products - UK, US, Germany, United Arab Emirates (Morcotilo I., Lupusor A; 2014). Although, exporting fruits to EU markets the farmers shall respect a set of requirements: control of contaminants in foodstuffs, health control of foodstuffs of non-animal origin, labeling of foodstuffs, plant health control etc (Trade Export Helpdesk; September 2014). Also, the distance between markets and trade policy has an important role, as they add supplementary costs that may make the products uncompetitive on the corresponding markets. To comply to these requirements farmers will need time and money.

Although, no data exists yet on exports of particular kind of fruits for August, that would permit to evaluate the evolution of exports of the banned products (the ban for fruits and vegetables were imposed on July 2014), the losses Moldova may have from the ban on apples, pears and quinces exports this year have been estimated at 44,9 mln USD, in case there will be not found alternative markets for these products.

Table 3. Estimation of direct losses in revenues from the ban on Moldovan exports of apples, pears and quinces to the Russian Federation

Product	Forecasted exports for 2014, thousand tonnes	No banned exports, thousand tonnes	Banned exports, thousand tonnes	Loses related to banned exports, mln USD (0,3 USD/kg)
Apples, pears, quinces	192,2	42,6	149,6	44,9

Source: Authors' own calculations

Winemaking sector. Winemaking is another sector exposed to risk of high losses. Although, Russia has reduced significantly its share in the total volume of wine exports of Republic of Moldova, in the last year there have been delivered almost 35 mln USD to this destination, that remains an important market for Moldovan winemakers.

The embargo last year and trade policy tightening will emphasize the problems in this sector. The most severe shock the sector suffered in 2006. Till now, some enterprises succeeded to move to other markets, others have gone bankrupt and some of them decided to stay on the Russian market. Consequently, although the share of Russian Federation in Moldovan wine exports decreased from 75% in 2005 to almost one fourth (23%) in 2013, winemakers didn't record high progresses to diversify their markets. The changes in export structure of this product was mainly the result of a significant drop of exports of grape wine to Russia (from 250.7 mln liters in 2005 to 26.7 mln liters in 2013). The volume of exported wine to all destinations decreased significantly during this period, recording 123.3 mln liters in 2013 or 38.4% compared to the 321.4 mln liters of wine supplied in 2005.

There are many dynamic markets that import high volumes of wine, including China, Japan, Suisse, USA, Germany (Morcotilo I., Lupusor A .; 2014), although beside high costs linked to products supply, when we speak about wines it is very important to take into account the tastes and the culture of consumers. To produce competitive or differentiated products that would be preferred to others due to their specific characteristics is very important. But, although Republic of Moldova is a country with traditions in wine production, the sector faces a lot of constraints to penetrate new, more sophisticated markets. In 2013, 71,5% of Moldovan grape wine exported went yet to CIS countries. According to our estimations based on the wine exports evolution trend, the ban on this product may determine a 37,9 thousand liters in the current year, or about 34 mln USD.

Table 4. Estimation of direct losses in revenues from the ban on Moldovan exports of wines to the Russian Federation

Products	Forecasted exports for 2014, thousand litres	No banned exports, thousand litres	Banned exports, thousand litres	Loses related to banned exports, mln USD (0,9 USD/litre)
Wine	124,1	86,2	37,9	34,1

Source: Authors' own calculations

Live animals and products of animal origin exports are concentrated as well on Russian market: beef meet fresh or chilled (100%), mutton or goat meat, fresh, chilled or frozen (77%), butter and other fat substances made from milk (81%) etc. About 54% of live animals and animal products exported by the Republic of Moldova are intended for the Russian market.

The embargo on meat export will force farmers to find new markets, but for this category of products, as well as for fruits and vegetables there will be needed great efforts to find new markets. There are two main considerations. The first is that the above products are perishable and need special equipped transport and good quality of roads to deliver them at greater distances. The second is quality standards that are usually very stringent for fruits and vegetables and especially, products of animal origin.

Vegetables are another category of products exported mainly on the Russian market. Though, in the case of these products, the Russian embargo will affect predominantly intermediate traders, and other related services, especially transport services. Russia is the destination for 85.7% of vegetables exported by Republic of Moldova. Although, 82% of the total exports of vegetables of Republic of Moldova are re-exports. The share

is even bigger, 93.3% in case of Moldovan origin exports of vegetables to Russia. Also, the vegetables trade balance of Republic of Moldova is negative, counting about USD 20 MLN. in 2013.

Table 5. Moldovan exports and re-exports of vegetables in 2013

Trade flow	Partner	Nominal value (thous. USD)	Share, %
<i>Gross exports</i>	<i>Total</i>	12,554.8	100.0
Gross exports	Russian Federation	10,758.8	85.7
<i>Re-exports</i>	<i>Total</i>	10,283.4	100.0
Re-exports	Russian Federation	10,036.0	97.6
<i>Re-exports /Gross export</i>	<i>Total</i>	-	81.9
Re-exports /Gross export	Russian Federation	-	93.3

Source: Elaborated by the authors based on UN Comtrade data

In short time, a solution for farmers breeding animals and producing meat, for vegetable growers a solution to reduce risks associated to Russian embargoes could be to exploit the internal market consumption capacity, as the share of these products in the total value of exports is very small and the country is a net importer for both categories of products. In medium term necessary structural reforms should be undertaken to exploit the development potential of these sectors to increase the volume and the quality of the production.

With the above being said, cannot be neglected the negative effects that Russian measures may have on the food sector and on the economy as a whole. Although, practical experience shows that such practices are possible and unpredictable in Russian – Moldovan economic relations. So the solutions should come from within the country. Radical reforms should be undertaken to ensure a competitive sector in the country and abroad.

To mention that the reactions of the Russian Federation occur in spite of the preferential trade regime it has with Republic of Moldova. Both the Bilateral trade agreement signed in early 90's, as well as the multilateral agreement on free trade area within the CIS countries aims at assuring a framework for complete liberalization of trade among partners. This regulatory framework prove to be, however, imperfect, as is the case of many other normative acts signed within the CIS area, where in reciprocal trade there are numerous barriers, both tariff and non-tariff. The Russian Federation reserved itself the right to maintain export duties for a set of important products for Moldova (the most relevant example in this regard being the natural gas); without negotiations and any arguments import duties were re-introduced for some Moldovan products and on top of these, embargoes were imposed.

3. Conclusions and recommendations

Several conclusions and appropriate recommendations could be drawn from the present analysis.

1. In the short run, domestic food producers would feel the negative consequences of Russian restrictive measures in external trade with Republic of Moldova, other sectors such as internal trade, transport etc., being contaminated too. Although, in these conditions farmers and food producers, as well as public authorities, should be motivated to make solid structural reforms to increase sector's immunity to similar shocks;

2. Local growers of apples, grapes, plums, wine-makers would be the most affected by the recent trade measures enforced by the Russian Federation. A more active involvement of the public authorities to sustain the sector is required: assisting producers in identifying new markets, developing the post-harvesting

infrastructure and raw materials processing capacity. In this respect, though it is rather a mid-term task, it is important to modernize the quality infrastructure and to assist the local producers in adjusting to it, which would open them larger foreign market penetration opportunities. As concerns farmers, they should consider the old adage “don’t place all your eggs in one basket”, or the concentration on one market create dependence, and high risks to external shocks;

3. Exporters of meat and vegetables will also be subject to risks. At the same time, only several producers will suffer and the re-exporters of vegetables;

4. In the short term, the cushioning of the negative effects produced on the Eastern platform will be possible by taking a promptly attitude and boosting cooperation between farmers, local authorities and the entire civil society for supporting this sector. Producers should focus on quality and consumers’ demands, so that their products are sought on the shelves of the local shops. As consumers, local population should learn to consume local products. Public officials need to realize that by helping the business environment to develop, they contribute to increase country’s prosperity and their own in particular;

5. The producers need to valorize all opportunities which are offered by foreign markets. If, however, certain partners regularly infringe upon the rules of the game, these risks shall be taken into consideration in the process of business planning.

References

- Hedenskog J., Larsson R. L.. Russia leverage on the CIS and the Baltic states. June 2007. Stockholm: The Swedish Defence Research Agency (FOI), FOI-R--2280--SE. (http://www.foi.se/ReportFiles/foir_2280.pdf);
- Morcotilo I., Lupusor A . The specifics of trade relations with the Russian Federation and what are alternative markets for Moldova. Chisinau, 2014. (<http://www.expert-grup.org/en/biblioteca/item/1004-piete-alternative-rusia&category=183>);
- Radeke J. The economic impact of Russian trade sanctions. Issue nr. 24. October, 2014 (<http://www.get-moldova.de/download/Newsletter/2014/Newsletter%2024%20GET%20Moldova.pdf?PHPSESSID=d392ef2f6cc8d0bec2f686c4e9ec01f>);
- Russia, unhappy with Moldova's EU drive, bans its wine and spirits. Reuters, Sept. 10, 2013 (<http://www.reuters.com/article/2013/09/10/us-moldova-russia-wine-idUSBRE98916M20130910>);
- World Bank Data available at <http://data.worldbank.org/indicator/EA.PRD.AGRI.KD>;
- Постановление правительство Российской Федерации от 31 июля 2014 г. N 736 О введении ввозных таможенных пошлин в отношении товаров, страной происхождения которых является Республика Молдова (http://www.consultant.ru/document/cons_doc_LAW_166539/);