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Food Trade between China and Romania: Before and After the COVID-19 Pandemic

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Abstract

Over the past decade, the trade turnover between China and Romania has more than doubled, but food and agricultural products still occupy a fairly modest portion of trade between the two countries. There are significant prerequisites for the development of food trade, since Romania possesses competitive advantages in the production of certain types of agricultural products, while China is the world's largest food importer. However, in the times of the COVID-19 outbreak, global markets have been hit by the economic downturn and the disruption of supply chains. Due to the emergency of the health crisis, the influences of market volatilities stemmed from the pandemic on food trade have been poorly explored. This paper attempts to investigate contemporary tendencies in China-Romania bilateral trade in food by analysing the dynamics and composition of trade in 2009-2018, revealing competitive advantages of both China and Romania in trade in major food products, and estimating potential effects of the economic recession stemmed from the COVID-19 health crisis on bilateral China-Romania trade in food and agricultural products.

Keywords: China, COVID-19, export, food products, import, Romania, trade.

JEL Classification: Q17, F17

1. Introduction

Today, China is the world's largest importer of food and agricultural products. Largely due to abundant imports, the country has succeeded to ensure a high level of food security for its population. The countries of Eastern Europe have been increasingly exploring China's large and receptive market by supplying various types of high-quality food with high added value, as well as agricultural raw materials.

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Among Eastern European economies, Romania is one of the biggest agricultural producers. Trade relations between Romania and China are developing, not so much due to agricultural products, as due to the import of certain types of equipment and technological products from China. Nevertheless, many scholars, for instance, Drăgoi et al. (2018), Andrei et al. (2017), Niculae and Costaiche (2016), and Neculita et al. (2011), among others, note substantial comparative advantages of Romania in the production and supply of food to the global market, including to China.

Many trade development perspectives, however, have been aggravated by the most recent outbreak of COVID-19. In terms of sustainable supply of food, the pandemic crisis has become a global economic challenge. According to Welsh (2020), the COVID-19 crisis influences supply of food and agricultural products by violating global logistics chains. It also degrades the living standards of the population, reduces purchasing power, decreases production capacities of the agricultural sector, and disrupts distribution of food. Since the beginning of 2020, many governments have introduced restrictions on export of various kinds of food products and agricultural raw materials. These protectionist measures could provoke food shortages and create volatilities in the global food market, as it happened in 2007-2008 during the financial crisis. Headey (2011) and Martin and Anderson (2011) found that in that time, food trade regulations fuelled the growth of prices for soya, rice, and cereals. In some countries, the attempts to decrease shortages in food supply resulted in the disruption of the delivery and distribution chains.

Being dependent on agricultural imports, China is particularly vulnerable to such distortions of supply that could increase food insecurity in the domestic market. In an attempt to sustain its food supply channels, China has been looking for the diversification of suppliers in the global food market. Romania could use its agricultural potential to increase the portion in food delivery to China, but the potential impacts of COVID-19 pandemic on food trade between the two countries require comprehensive assessment.

2. Problem Statement

Trade aspects of food security have been widely discussed in the literature, but the role of trade in ensuring food supply has been questioned. While Wegren and Elvestad (2018) and Clapp (2017), among others, argue that trade contributes to establishing the adequate availability of food on the domestic market, there have been studies that approach the understanding of food security from the position of agricultural production (Smith et al., 2000), economy (Timmer, 2000), or health (Toffolutti et al., 2020). Nevertheless, the emergence of trade-related issues of demand gaps and food price surges during the global crises suggest that trade plays an important role in ensuring food security. There are evidences of how trade restrictions have triggered food inflation during the food crises since the 1970s (Johnson, 1975; Ivanic and Martin, 2008; Timmer, 2010). Anderson and Nelgen (2012), Abbott (2011), and Rude and An (2015) also found that trade policies might aggravate food insecurity. Bakalis et al. (2020), Petersen et al. (2020), and Bhunnoo

(2019) found that the outbreaks of SARS, MERS, Ebola, and avian influenza had a negative effect on food supply throughout the world.

Regarding COVID-19, there have been preliminary estimations of how the pandemic could influence food supply globally. They were performed by the Food and Agriculture Organization of the United Nations, World Food Programme, United Nations Commission on Trade and Development, World Health Organization, and International Food Policy Research Institute. Despite the fact that the effects of the COVID-19 outbreak have been roughly assessed for most countries of the world in terms of trade and consumption of food and agricultural products, as well as major agricultural inputs (Erokhin and Gao, 2020), none of the reports have particularly addressed the trends in food trade between China and Romania.

Thus, it is worthwhile to say that trade impacts of the COVID-19 pandemic on the distribution of food have been explored insufficiently. Many of the studies that are appearing today on the wave of the COVID-related research agenda are focusing on the aspects of food safety (Unhale et al., 2020), agriculture productivity (Mikiibi, 2020; Hussein & Greco, 2020), and healthy nutrition (Rahman et al., 2020). The problems of disruptions in food imports in food importing countries and negative trade balance remain underscored. Similar to global trade reports released by various international organizations, there have been no investigations of China-Romania trade in food and agricultural products that would link the perspectives of food trade with COVID-19 economic effects.

3. Aim of the Research

In light of the existing gaps in studying China-Romania trade relations, the current paper aims to analyse the dynamics and composition of food trade between the two countries in the past decade, reveal competitive advantages of both China and Romania in major food products, and estimate potential effects of the global economic recession induced by COVID-19 health crisis on bilateral China-Romania trade in food and agricultural products.

4. Research Methods

China-Romania trade (total trade and food trade) is analysed across an array of parameters, including foreign trade balance, foreign trade turnover, export, import, composition of food export, and composition of food import. Competitive advantages of both China and Romania in food trade are estimated by comparing the volumes of export from China to Romania with those of export from Romania to China. The data for this study are derived from the global database of the United Nations Conference on Trade and Development (UNCTAD, 2020). SITC Commodity classification is used. The total volume of agricultural trade in both exports and imports is generalized as SITC "All food items" (SITC 0+1+22+4). Detailed lists of import and export products are built along 37 positions and include major food and agricultural commodities traded between China and Romania in 2009-2018.

5. Findings

The decade that has passed since the global economic recession in 2008-2009 has turned out to become a period of recovery and growth in trade between China and the countries of Eastern Europe in general, and between China and Romania in particular. Exports from China to Romania grew by 88.6% (from $2.38 billion in 2009 up to $4.48 billion in 2018), while exports from Romania to China skyrocketed fivefold from $433.01 million in 2009 to $2.33 billion in 2018 (Figure 1). Despite some fluctuations in the volume of trade balance in the early 2010s, it has been remaining consistently positive for China throughout a decade. The trade deficit with China is common for all countries of Eastern Europe. In food trade with Romania, however, the deficit has been shrinking since 2011 amid the growing export to China (Figure 2).

The food trade balance is still positive for China, but Romania has succeeded to increase its supplies from only $1.43 million in 2009 to over $29.43 million in 2018. Romania is a big supplier of meat and edible meat offal to China. Its export volume has been increasing steadily since 2010. Other export items include various edible products, cereals and cereals preparations, sweets (Appendix, Table 2). From China, Romania consumes fruits and nuts, vegetables, roots and tubers, various edible products and preparations, fish, molluscs and crustaceans, tea and spices, and oil seeds and oleaginous fruits (Appendix, Table 1).

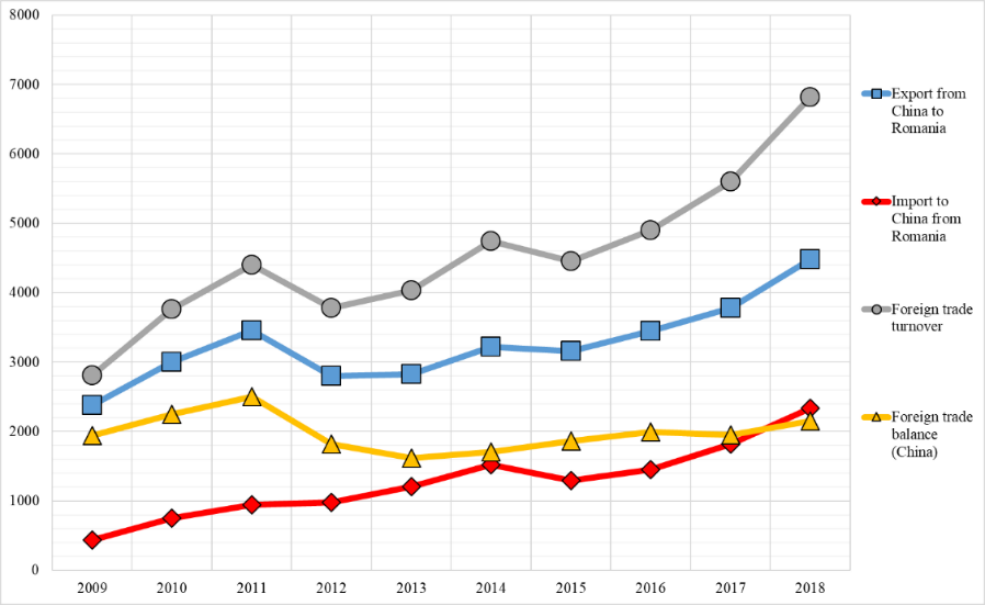

Figure 1. Total trade between China and Romania in 2009-2018, $ million
Source: authors' development based on UNCTAD (2020)

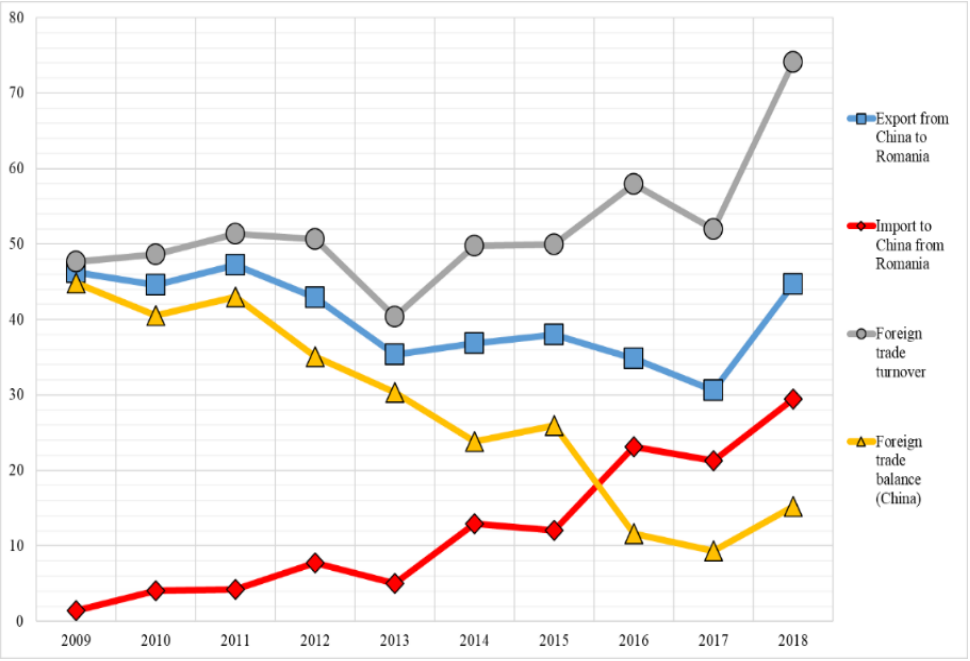

Figure 2. Food trade between China and Romania in 2009-2018, $ million
Source: authors' development based on UNCTAD (2020)

Thus, the analysis revealed positive dynamics in China-Romania trade in food and agricultural products. In a normal situation, one would expect further growth in bilateral trade. However, during the COVID-19 pandemic, food supply chains are affected by many factors. Due to the disruptions of local supply chains, food prices have been increasing at many markets in both Europe and Asia (FAO, 2020). For such countries like Romania (focused on a small range of export products in trade with China), there is also a risk that limited resources concentrated on the production of particular food products would not allow to diversify export (Vos et al., 2020).

To curb the negative impact of the lockdowns, trade restrictions, disrupted supply chains, and economic recession on the food trade balance, both countries should concentrate their resources on producing and supplying the products in which they possess comparative advantages over each other. The analysis of bilateral export volumes allowed the authors to reveal that for Romania, "export competitive" products include beverages and spirits (wine), dairy products (concentrated milk), honey, cereal preparations, and meat products, including edible meat offal (Figure 3).

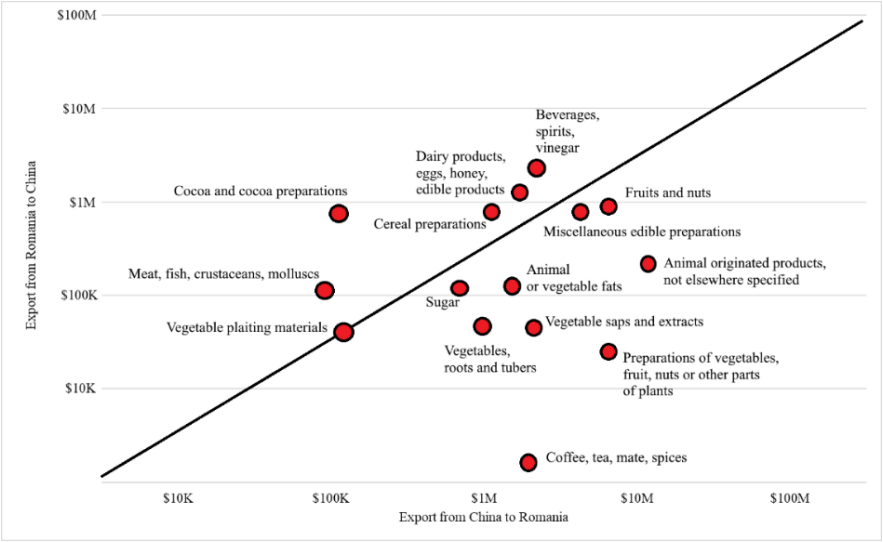

Figure 3. Exports by food and agricultural products between China and Romania in 2018
Source: authors' development based on OEC (2020)

Chinese agricultural producers are particularly competitive in supplying Romanian market with fruits, edible products and preparations, animal fats, vegetables, roots, and tubers, sugar, and traditional Chinese products.

6. Conclusions

This study is a rough attempt to discuss the potential effects of the COVID-19 crisis on food trade between China and Romania. It is revealed that food trade between the two countries has been progressing since the end of the global economic recession of 2008. The food trade balance has remained positive for China. Nevertheless, among the countries of Eastern Europe, Romania has emerged as one of the big suppliers of various food and agricultural products to China. The analysis conducted in this paper demonstrated China's advantages in trade of fruits, vegetables, edible products and preparations, sugar, tea, and spices, and Romania's advantages in the export of beverages, dairy products, cereal preparations, and meat to China.

As trade and economic effects of the spreading of COVID-19 on food security at a global level have been emphasized by many scholars, it is safe to assume that the crisis will affect food trade in terms of lockdowns imposed on domestic economic activities and international exchange, food trade restrictions initiated by some countries, and degrading purchasing power of people and businesses. Potentially, the losses to food trade could be reduced by expanding the supplies of those products in which both countries enjoy competitive advantages in trade. As more comprehensive and recent data on China-Romania food trade become available, authors' assessments should be adjusted. Also, the set of parameters could be

increased to be able to better reflect the influence of food trade on food security in both countries, including such dimensions of food security as stability of supply chains and utilization of agricultural products.

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Appendix

Table 1. Export of major food and agricultural products from China to Romania in 2009-2018, $ million

Products	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Fresh fish	3.06	4.25	5.72	3.85	2.84	2.43	2.03	1.89	1.48	2.50
Vegetables	13.27	8.63	12.86	9.12	7.17	3.65	3.08	2.63	1.34	2.94
Roots, tubers	12.92	14.91	9.72	11.89	7.45	9.65	12.07	10.22	5.55	11.64
Fruits, nuts	4.97	2.05	4.00	3.19	4.35	5.59	10.80	8.97	7.69	12.92
Preserved fruits	2.00	1.96	1.69	1.52	0.79	0.86	0.21	0.60	1.27	0.90
Feeding stuff	0.23	0.33	0.28	0.18	0.25	0.30	0.21	0.48	0.83	0.68
Edible products	1.90	2.25	3.04	3.73	3.61	3.54	2.47	2.24	2.49	3.28
Oil seeds	2.65	3.31	3.13	3.61	4.09	2.00	0.66	0.43	0.71	0.77

Source: authors' development based on UNCTAD (2020)

Table 2. Export of major food and agricultural products from Romania to China in 2009-2018, $ million

Products	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Meat	0.01	0.11	0.32	1.22	0.96	1.04	1.91	14.48	12.36	0.36
Milk	-	-	-	-	-	-	-	0.03	0.40	1.69
Preserved fruits	-	0.11	-	-	0.07	0.43	-	0.14	0.13	0.94
Sugar, honey	-	0.03	0.04	0.19	0.08	0.11	0.49	0.54	0.19	0.05
Chocolate	-	0.06	0.24	0.51	0.54	0.61	0.79	0.75	0.61	0.71
Edible products	0.01	0.01	0.03	-	0.05	0.06	0.05	0.07	0.37	1.45
Non-alcoholic beverages	-	0.01	0.02	0.07	0.11	0.23	0.25	0.11	0.08	0.06
Alcoholic beverages	1.15	2.94	3.12	3.86	3.09	4.04	4.06	3.38	3.37	3.21

Source: authors' development based on UNCTAD (2020)