Slovenian agri-food trade with Ukraine and Russia

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Abstract **– War in Ukraine brings many social implications and challenges for policymakers. Among other things, the war will also affect the global food security and functioning of food systems. In this paper, we wanted to investigate how extensive the impacts on food chains will be in Slovenia. For this purpose, we analysed the trade in agri-food products between Slovenia and the two countries, involved in the war, as well as purchase prices. The analysis shows that the import of agricultural commodities from Ukraine and Russia to Slovenia is not significant. However, this does not imply that there are no negative impacts on food chains in Slovenia. The negative impacts of war are mainly indirect, through rising prices of energy and other production inputs, rising prices of agricultural commodities, as well as uncertain political and economic developments, which affect all stakeholders of the food chains.**

INTRODUCTION

It is clear that the war in Ukraine will negatively impact the global agricultural markets (FAO, 2022; Geijer, 2022). Ukraine and Russia together are among the largest producers and exporters of several important grains, sunflower oil, fertilisers, and fuel (Emedieqwu, 2022; UNCTAD, 2022). Ukraine ranks first in sunflower oil production, while Russia ranks second. Together they contribute to more than half of global exports of this commodity. Russia is the world's second largest producer of barley, fourth largest producer of wheat, and tenth largest producer of maize. The two countries are responsible for around one quarter of global wheat exports. Russia is also the world's third largest producer of fuel and fourth largest producer of mineral fertilisers. Due to war, the agricultural production in Ukraine will be limited and will even be terminated in some regions of the country, while exports will be hindered. Many sanctions have been levied on Russia, which will undoubtedly lead to turbulences and restrictions on trade with agri-food products. Shortages and rising prices of food and agricultural inputs as a consequence of war will affect global food security (Emedieqwu, 2022).

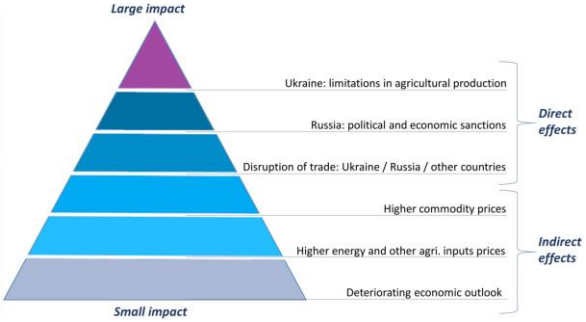

Figure 1. Possible effects of the war in Ukraine on the food system (adapted from Geijer, 2022).

Agricultural markets across the world will be affected in multiple ways and by different magnitudes (Geijer, 2022). The highest magnitude of those effects will be felt in the highly import-dependent countries, especially developing and lower income countries. For example, in some African countries (e.g. Benin, Somalia), almost all of the imported wheat originates either from Ukraine or Russia and those countries will face the largest direct effects of war (e.g. food scarcity, even hunger) (UNCTAD, 2022). On the other hand, the countries that are self-sufficient with above mentioned agricultural commodities, will face indirect effects, such as the rising prices of agricultural inputs (e.g. fuel and fertilisers), which will in turn lead to higher costs of food production (Emedieqwu, 2022).

The European Union (EU) countries, including Slovenia, are among the group of countries that will undoubtedly feel the consequences of the war, mainly through indirect effects. It should be noted, that food shortage is currently not a problem in EU countries, as the EU is a net food exporter and top agri-food producer and as such is largely self-sufficient in many agricultural products (EC, 2022a). This is especially true for cereals, but not so for sunflower oil. In recent years, the EU was among the top importers of Ukrainian sunflower oil (Emedieqwu, 2022). As already said, the biggest threat to European farmers is the rising prices of the main production inputs, that are imported from Russia, such as energy and mineral fertilisers. The increase in prices of those inputs already began in the second half of 2021, and these increases continue with the war. It is expected that the rising prices of agricultural commodities (at the producer level) will probably not follow the rising prices of production inputs, which will shake the economic stability of farmers.

The purpose of this paper was to answer the question of Slovenia's dependency on some of the Ukraine's and Russia's important export commodities: wheat, maize, and sunflower oil, as well as the country's self-sufficiency in those commodities. At the same time, the rest of the agri-food commodities that are part of the trade flow between the countries were determined. Additionally, the movement of prices of the relevant commodities was analysed, namely on foreign markets and the Slovenian market.

METHODS

For the purpose of analysing the trade in agri-food products, we analysed the SORS (2022a) foreign trade data by 8-digit code of the combined nomenclature and by countries. We analysed in detail the regional structure of wheat, maize, and sunflower oil imports to Slovenia. Additionally, we analysed the structure of imports of agri-food commodities from Ukraine and Russia.

The self-sufficiency data that were analyzed in the paper were obtained from the national supply and use balance sheets of agricultural products, which are prepared annually by the Agricultural Institute of Slovenia (SORS, 2022b).

In the analysis of purchase prices of the relevant agricultural commodities on foreign and domestic markets, the data obtained from EC reports (2022b) and AAMRD reports (2022) were used. Data were analyzed on a weekly, monthly and annual basis.

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RESULTS

The results show that trade in wheat, maize and sunflower between Slovenia and Ukraine or Russia is very low and in some years nonexistent.

Slovenia produces about three quarters of the total domestic cereals demand, which means that the production of cereals in Slovenia is lower than domestic consumption. According to the latest data for 2020, Slovenia's self-sufficiency rate for cereals is 88%, with the highest self-sufficiency rate for maize (average of 2015–2019: 92% self-sufficiency rate) and the lowest self-sufficiency rate for wheat (average of 2015–2019: 49% self-sufficiency rate). Slovenia meets the rest of its cereal needs through imports. More than 80% of cereal imports originate from neighboring countries: Hungary, Austria and Croatia, with Hungary being the main trading partner.

Sunflower oil is also not imported from Ukraine and Russia. The majority of imports come from Hungary, Serbia, and Croatia (average of 2015-2019: almost 70% of total sunflower oil imports, 2020: 82% of total imports).

Imports of other agri-food products from Ukraine and Russia were also examined. In 2020, imports from Russia accounted for 0.02% of total agri-food imports, while imports from Ukraine accounted for 0.11%. In comparison with a five-year average (2015–2019), imports from Russia accounted for 0.11% of total agri-food imports, and imports from Ukraine accounted for 0.09%. The majority of imported commodities from Ukraine in the years 2015–2019 were nuts (60% of total imports from Ukraine), which in the structure accounted for about 7% of all nuts imports.

According to SORS data, purchase prices in Slovenia have already increased sharply in 2021, with prices of wheat by 27% and grain maize by 66%. Purchase prices were at their highest level since 2012. Oilseed prices also increased sharply, with rapeseed prices by 41%, and soybean prices by 58%. The price growth continues in 2022. According to the market report (AAMRD, 2022), the prices of wheat and maize on European markets and in Slovenia continue to increase. For example, in the first nine weeks of 2022 (compared to the same period in 2021), wheat prices in Slovenia increased by 55% and maize by 80%.

DISCUSSION

The results confirm that Slovenia is not dependent on food imports from Ukraine and Russia. Agricultural markets were already in turmoil even before the start of the war in Ukraine (rising prices of inputs and prices of agricultural products), and this war will bring even greater instability and further pressure on prices. Unlike some other countries, the EU and Slovenia will not experience food shortages, but the indirect effects of the war will severely affect stakeholders along the entire food chain (higher commodity prices, higher energy prices, deteriorating economic outlook). Food producers and processors will face an overall increase in production and processing prices, as well as higher prices of transport, storage, etc. Distributors and traders will face new negotiating positions and possibly changing sales channels. Consumers, on the other hand, will feel the effects of this war through much more expensive food. Rising food prices will push the already vulnerable consumer groups into poverty, even in more developed countries (Emedieqwu, 2022).

Countries will face issues of food independence, opportunities to increase self-sufficiency, providing food to vulnerable consumer groups, etc. In recent decades, in order to take into account the protection of the environment and human health, food production has gone in the direction of achieving quality goals (e.g. organic production), rather than quantitative results. In this situation, higher crop yields will have priority (at least in the short term), which will be a considerable challenge given environmental standards. Changed consumer patterns are also expected. For example, with the significantly higher price of sunflower oil (including the insufficient amount of this type of oil), consumers and industry will be forced to use substitutes, namely other vegetable oils. With the expected high price of livestock products, certain changes in eating habits are also expected (e.g. lower meat consumption). We can conclude that this crisis will undoubtedly bring many changes along the entire food chain, and the extent of these changes depends mainly on the duration of the war.

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