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Corresponding author: aleksandra.gajdobranski@fjsp.edu.rs

INDEX OF REVEALED COMPARATIVE ADVANTAGES IN THE SYSTEM OF NUMERICAL DATA AT OILSEEDS

Aleksandra Gajdobranski

Faculty of Business Studies and Law,
"Union - Nikola Tesla" University, Belgrade, Republic of Serbia,
e-mail: aleksandra.gajdobranski@fjsp.edu.rs

Milan Janković

Faculty of Business Studies and Law,
"Union - Nikola Tesla" University, Belgrade, Republic of Serbia,
e-mail: milan.jankovic@fjsp.edu.rs

Vera Krmpot

Faculty of Business Studies and Law,
"Union - Nikola Tesla" University, Belgrade, Republic of Serbia,
e-mail: vera.krmpot@fjsp.edu.rs

Abstract: *The index of revealed comparative advantages (RCA), which we express in percentages, can be used to calculate exports and imports by year and country. In this paper, we will analyze the RCA of soybeans and sunflowers, where if the values of this index are greater than zero in the analyzed years, comparative advantages in exports have been achieved, and vice versa. The subject of the research is the index of discovery of comparative advantages (RCA), as an indicator that determines the realized turnover and, based on the results, gives a suggestion to the country for the turnover of the given product (oilseeds - soybeans and sunflowers and their products). The most important export products from oilseeds are sunflower and soybean oil for human consumption and sunflower and soybean meal as animal feed. The turnover of these products on the domestic market takes place in favor of the EU and CEFTA countries, which reflects our comparative advantages. The main goal of the research is to use scientific methods to analyze the RCA of plant production in oilseeds and their products for the period from 2019 to 2022, through primary and secondary data. The paper also used tables in which*

summarized data for the most important regions and plant crops were presented, supplemented by more graphic representations through graphs. The main sources of data used in this scientific and research work are statistical yearbooks of Republic of Serbia and statistics of foreign trade, internal material Reports of the business association "Grain of Republic of Serbia", studies on the competitiveness of Republic of Serbian agriculture, data collected via the Internet, as well as author's research published in books, other magazines and publications. Among the foreign statistical sources, the database www.fao.org, www.eurostat and world agriculture magazines Nitra, foreign trade statistics, USDA (United States Statistical Date) were used the most. This paper aims to make a theoretical and practical contribution in defining a long-term development strategy for oilseeds and their products with reference to RCA.

Key words: *Index, comparative advantages, oilseeds, export-import.*

INTRODUCTION

In the last few years, we have witnessed significant changes taking place in the biosphere, such as climate changes, such as natural disasters, floods, droughts, stormy winds... In the future, it is expected that these changes will become more frequent and pronounced, which will especially affect agricultural production, which mostly depends on the climate [Miladinović, Prodanović, 2018]. When it comes to agricultural production, our comparative advantages are primarily reflected in the production of cereals and oilseeds, where oilseeds (especially rapeseed) are gaining more and more importance. Therefore, attention should be paid to the production of health-safe and ecologically clean food from oil crops, which could increase exports and reduce imports [Gajdobranski, et al, 2016]. New barriers in free circulation in recent years arise due to different international standards for food quality, which were introduced for consumer protection. The occurrence of deaths and serious diseases of the population are the result of eating due to "mad cow or bird flu" disease, as well as other domestic animal diseases. There is also concern about genetically modified food (GM), especially soy, which is an integral part of the diet of domestic animals and humans, and is also used in many food products as a necessary ingredient [Gajdobranski, 2022]. The domestic market is getting smaller due to the reduction of the population, while agricultural production realizes surplus products that must be placed on foreign markets, as a result of which it is important to point out the index of revealed comparative advantages - RCA.

The trade balance and competitive comparisons of one country in trade with other countries of the oilseed world can most accurately be examined by the measure of revealed comparative advantages using the RCA-index, for all countries of the world. The RCA index is an indicator that determines the turnover (import/export) and, based on the results, gives a suggestion to the country for the turnover of that country [Gajdobranski, Anđelković, Janković, 2018]. RCA is expressed in percentages as a ratio, i.e. the proportion of the country that is a net exporter (in our example of oilseeds and their products) in the total turnover value of that product. We calculate the comparative advantage disclosure index using the following formula:

$$RCA = (X_i - M_i) : (X_i + M_i);$$

gde je: X_i = izvoz proizvoda M_i = uvoz proizvoda

RCA can have zero values (ie $RCA=0$), values greater than zero (ie $RCA>0$), and values less than zero ($RCA<0$). A value of 100 indicates that the analyzed country is an absolute exporter of that product. On the other hand, a value less than 100 implies that the country is an absolute importer of that product. Intermediate values indicate that the respective country had both import and export of the analyzed product, and zero values suggest the possibility that the import and export quantities are in balance. Values greater than 0 suggest that the country has comparative advantages in the production and export of the product in question. The RCA is based on foreign trade data, which reveals the products in which the country under consideration has comparative advantages. Given that historical data on foreign trade are used, RCA includes not only the impact of technology (or factor availability), but also the impact of government policy, and all other factors that affect foreign trade flows.

The European Union (EU) is a significant net importer of agricultural products, a net exporter of agricultural products, as well as one of the founders of global trade agreements within the World Trade Organization (WTO). For 2021, the WTO predicted that the volume of global trade will partially recover (increasing at an annual growth rate of 7.2%), but by the beginning of 2022, this forecasted recovery turned out to be slower, due to a slower recovery of global GDP in 2021

[Gajdobranski, Janković, Krmpot, 2021]. Given that the Covid-19 pandemic affected international trade, a smaller decline in imports and exports at the world level was estimated, while an increase in domestic consumption was estimated. It is noticeable that the crisis that occurs within an economic activity leads to a new and more modern technological basis, which is aimed at a significantly greater volume of production and turnover. In this regard, the economic relations between countries, which manifest themselves differently in today's crisis conditions at the international level, have a great influence, which is why the emphasis is placed on the method of comparative advantage.

The method of comparative advantage was defined by Balass (1965) [Balass, 1965], where he explains the ability or possibility of an economy to compete with the same products in the world with its export products. The concept of the Balassa index, which represents the logarithmic value of the relative coverage of imports with exports in certain sectors or products, according to the coverage at the level of the economy, is usually applied. It was created to show the comparative advantage of products where exports are greater than imports. Positive values of the RCA indicator for a specific product show that the economy has comparative advantages in the turnover of that export product. The higher the RCA indicator, the greater the comparative advantage of a certain product of the economy. The negative sign of the RCA indicator shows the absence of comparative advantage [<http://teme2.junis.ni.ac.rs/public/journals/1/previousissues/teme4-2012/teme%204-2012-15%20lat.pdf>].

One of the authors, Tomić (2004) [Tomić, 2004], suggests that the economic development of many countries depends on food production and traffic barriers. World agricultural production today is characterized, on the one hand, by food hyperproduction and market surpluses, and on the other hand, by food shortages and hunger (eg African countries). If we compare neighboring countries with our country, it can be seen that our producers have significantly less support from the state, which is primarily reflected in subsidizing agricultural production and exports to foreign markets [Gajdobranski, Latković, Janković, 2018]. Today, in the conditions of Covid-19, this gap is deepening even more, which is why it is necessary to carry out a more detailed analysis of the trade balance, which can best be shown through the index of revealed comparative advantages - RCA.

1. INDEX OF REVEALED COMPARATIVE ADVANTAGES AT THE SOY MARKET

Since 2019, soybean production at the world level has been constantly growing, and what was marked by the period of the covid-19 pandemic, and its share exceeds 65% of the total oilseeds produced [<http://www.indbilje.co.rs/wp-content/uploads/2019/06/Proizvodnja-i-prerada-uljarica-60-sa-reklamama.pdf>].

Based on the report of the US Department of Agriculture (USDA), in 2021 there is a growth of soybean production in the world by 5.5%, according to the growth of production and exports in Brazil and the USA. The four largest producers are Brazil, the USA, Argentina and China, which account for 86% of the total production. China is the world's largest importer of soybeans, the largest producer of soybean oil, and the largest consumer of soybean meal. Taking advantage of low prices in mid-2020 in the face of covid-19, China increased its purchases of US soybeans and soybean products, which contributed to a rapid reduction in exporter inventories and a rise in prices. Argentina remained the world's largest exporter of soybean meal and soybean oil, while the European Union remained the world's largest importer of soybean meal [Žita Srbije, Monthly soybean report under the auspices of FAO, Belgrade, April 2021/e-mail:zitasrbije@gmail.com].

In the world, on an annual level, there are smaller initial stocks of this oilseed, but with production higher by about 50 million/t compared to 2020. It is noticeable that in 2021 there is a proportional increase in consumption with closing stocks, which are higher by about 5 million/t on an annual basis. Faster growth in consumption than production has led to a drop in soybean stocks in the world. World production, consumption and stocks of soybeans are shown in Table 1 [<https://www.zitasrbije.rs/download/Mesecni%20Izvestaj%209.21.pdf>]:

Table 1. World soybean production, consumption and stocks (2019-2021) u mil./t

| Soybean | Starting stocks | Production | Consumption | Export | Final stocks |
|---------|-----------------|------------|-------------|--------|--------------|
| 2019 | 114,10 | 339,89 | 358,40 | 165,06 | 95,48 |
| 2020 | 95,48 | 335,26 | 362,56 | 164,87 | 99,16 |
| 2021 | 99,16 | 385,14 | 377,27 | 173,08 | 104,57 |

In Table 1, we note that according to the data of the US Department of Agriculture published in the Report on Current World Agricultural Supply and Demand, 340 million/t of soybeans were produced in the world in the economic year 2019 (which is 5 million/t more than the production in 2020 and by 45 million/t less than the production in 2021). Soybean consumption at the world level in 2019 reaches 358 million/t (which is 5 million/t less than the consumption in 2020 and 19 million/t less than the consumption in 2021). The ending stocks in 2019 reached the level of 95 million/t, while in 2021 they reached the level of 105 million/t (which is 6 million/t more than the ending stocks in 2020 and about 9 million /t more than final stocks in 2021).

Based on the Report of the Republic Institute of Statistics (RZS), the foreign trade exchange of soybeans for the time period from 2019 to 2021 is shown in table 2 [USDA, Izveštaj o tržištu soje, 2021]:

Table 2. Foreign trade exchange of soybeans on the domestic market (2019-2021) u hilj./t

| Soybeans | | | | |
|----------|--------|--------|-------|---------|
| Year | Import | Export | Saldo | RCA (%) |
| 2019 | 6 | 128 | 122 | 91 |
| 2020 | 0,2 | 228 | 227,8 | 99,8 |
| 2021 | 1 | 300 | 299 | 99,3 |

In Table 2, we analyze the foreign trade balance in soybean imports and exports and the index of discovery of comparative advantages (RCA), which is positive if exports are greater than imports and vice versa. The foreign trade balance is positive in all three analyzed years and is obtained as the difference

between exports and imports, in 2019 it was 122 thousand/t, in 2020 it was 227.8 thousand/t, and in 2021 it was 299 thousand. /t. In the analyzed years, the largest balance was achieved in 2021, and the smallest in 2019. RCA in 2019 was 91% and was calculated based on the data from Table 2 as follows: $RCA=(128-6):(128+6)=0.910$. RCA in 2020 was around 100% and was calculated based on the data from Table 2 as follows: $RCA=(228-0.2):(0.2+228)=0.998$. RCA in 2021 was around 100% and was calculated based on the data from Table 2 as follows: $RCA=(300-1):(300+1)=0.993$. Based on the obtained results, we note that RCA was positive in all three analyzed years, which represents a surplus in exports. The import and export of soybeans on the domestic market based on the data from table 2 are shown in graph 1.

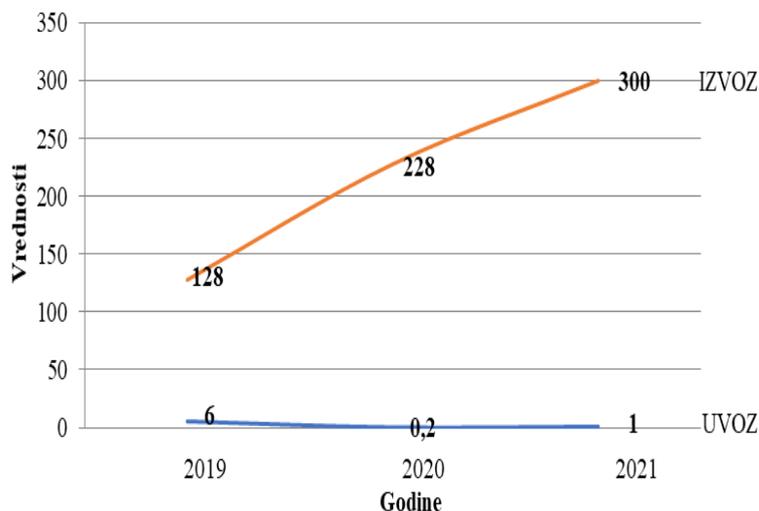


Chart 1. Import-export of soybeans on the domestic market (2019-2021) u - hilj./t (Source: USDA, 2021 Soybean Market Report (based on author's calculations))

In Chicago, soybeans rose 1.58% at the end of January 2022, while soybean meal rose 0.97%. Soybeans recorded a negative trend in this period. In Brazil, 5% of the soybean area was removed (in the Mato Grosso region). The yields are considered satisfactory, because in that region there was enough rainfall necessary for crop development (unlike Parana). Brazilian production is expected to be 133 million/t. Sufficient rainfall contributed to the fall in prices in Argentina. Since the

end of January 2022, the price of this oilseed in Chicago has increased, due to the increase in the price of oil, but also due to uncertainty about the production potential in South America [<https://www.agrosaveti.rs/finansiranje/promet-robanaproduktnoj-berzi/>]. Based on the monthly report of the “Žita Srbije”, table 4 shows the movement of soybean prices on the stock exchange in Novi Sad, Paris, Chicago and Minneapolis in certain months of 2021 [Žita Srbije Mesečni Izveštaj 9.21/Beograd, FEBRUAR 2022/e-mail : zitasrbije@gmail.com]:

Table 4. Trends in soybean prices in 2021/2022 din/kg; €/t; \$/t

| OILSEED | Last concluded price including VAT (din/kg) – 20.05.2020 | Chicago Stockexchange | Mineapolis Stockexchange |
|------------------|---|------------------------------|---------------------------------|
| Soy 2020. | | \$/t 563,37 fut jul (pad) | \$/t 559,75 (pad) |
| Soybeen meal 44% | | \$/t 401,10 fut jul (pad) | |
| OILSEED | Last concluded price including VAT (din/kg) – 04.10.2021 | Chicago Stockexchange | Mineapolis Stockexchange |
| Soy 2021. | 83,60 | \$/t 454,01 fut nov (pad) | \$/t 435,44 (pad) |
| Soybeen meal 44% | | \$/t 322,10 fut okt (pad) | |
| OILSEED | Last concluded price including VAT (din/kg) – 24.01.2022 | Chicago Stockexchange | Mineapolis Stockexchange |
| Soy 2022. | 81,40 | \$/t 515,52 fut mar (pad) | \$/t 498,79 (pad) |
| Soybeen meal 44% | | \$/t 393,90 fut mar (rast) | |

Soybean prices on the international market rose, which was influenced by the increase in Chinese demand and they were at the level [<https://agroinfonet.com/cene-na-berzi/plodno-bogato/>]: soja zrno, januar 2022. godine - 13,3200 \$/bušel (cca 27,216 kg) – 490 US \$ per tone; and soybeans,

January 2022 - \$415.00 / short ton (907.1874 kilograms). Due to the logistical problems caused by the hurricane, the so-called Ida, buyers moved from the US market to Brazil, which contributed to the strengthening of the Brazilian price. According to the projections of the US Department of Agriculture for 2022, the growth of soybean production in the world is predicted to be 5.55%, in line with the growth of production and exports to Brazil and the USA. On the Product Exchange in Novi Sad, soybeans recorded an absolute record in price jumps in 2021. The price of soybeans in September was 73.13 din/kg without VAT, which is even 70% higher than the price in the same period of 2020 (when the monthly weight was 42.95 din/kg without VAT). Nevertheless, soybean prices on the domestic market are on the rise during 2021, even a smaller supply in the middle of the year led to a sharp jump, which exceeded the trend of international prices.

2. INDEX OF REVEALED COMPARATIVE ADVANTAGES AT THE SUNFLOWER MARKET

The world production of sunflowers is about 31 million/t, while the area is around 24 million/ha. The largest producer is Europe (65%), followed by Asia and South America. In the world, over 70 types of oil are used for human consumption, where sunflower oil comes in fourth place in terms of consumption, and it is 4.2 times less than palm oil, 3.8 times less than soybean oil and 1.9 times less than canola oil, but also 3.5 times more than olive oil. Regional specificities are highly represented in consumption [<https://agrosmart.net/2021/09/13/suncokreta-u-svetu-31-milion-tona-malo-je-zemalja-koje-ga-gaje/>].

Based on the report of the US Department of Agriculture (USDA), in 2021 there was a slight increase in the world production of sunflower, where Ukraine (with about 30% participation) and Russia (with about 27% participation) stand out as the two largest producers of this oilseed. Total world production was around 57 million/t (about 3% higher than the previous year). Transitional stocks were at the level of 17%, where at the end of 2021 they amounted to about 2.6 million/t. According to analysts from UkrAgroConsult [USDA Sunflower Market Report 2021], sunflower exports from Ukraine in 2020 amounted to 47.3 thousand/t, which is 45% less compared to the same period of the previous year. The main

importer in this analyzed period was the European Union, which bought about 49% of total exports, while Turkey reduced its purchases by about 76%. Export growth was registered in Georgia, China and Iraq, while export slowdown was observed in Azerbaijan, Sweden and Romania. Given that the Covid-19 pandemic has affected international trade, a smaller decline in imports and exports at the world level is estimated, while domestic consumption (both grain and sunflower oil and meal) is expected to increase. On the domestic market, sunflower was mostly exported to the CEFTA countries, about 61% (of which the highest in Bosnia and Herzegovina, as much as 98%). Furthermore, the export destinations are the countries of the European Union (Romania about 34%, Hungary about 29% and Bulgaria about 20%). The production, consumption and stocks of sunflowers on the domestic market are shown in table 5 [Žita Srbije-kotacije 20.20]:

In the world, on an annual level, there are smaller initial stocks of this oilseed, but with production higher by over 6 million/t compared to 2020. It is noticeable that in 2021 there is a proportional increase in production and consumption, which is higher by about 6 mil./t. The faster growth of consumption than production has led to a drop in sunflower stocks in the world. The world production, consumption and stocks of sunflowers are shown in table 5 [[https://www.zitasrbije.rs/download /Mesecni%20Izvestaj%209.21.pdf](https://www.zitasrbije.rs/download/Mesecni%20Izvestaj%209.21.pdf)]:

Table 5. World production, consumption and stocks of sunflower (2019-2021) u mil./t

| Sunflower | Starting stocks | Production | Consumption | Export | Final stocks |
|-----------|-----------------|------------|-------------|--------|--------------|
| 2019 | 2,59 | 53,94 | 53,71 | 3,64 | 2,62 |
| 2020 | 2,62 | 49,14 | 49,54 | 2,99 | 2,05 |
| 2021 | 2,05 | 55,86 | 55,81 | 3,69 | 1,90 |

In Table 5, we note that according to the data of the US Department of Agriculture published in the Report on Current World Agricultural Supply and Demand, 54 million/t of sunflowers were produced in the world economy in 2019 (which is 5 million/t less than the production in 2020 and 2 mil./t less than production in

2021). Sunflower consumption at the world level reaches 54 million/t in 2019 (which is 4 million/t more than the consumption in 2020 and 2 million/t less than the consumption in 2021). The final stocks in 2019 reached the level of 2.6 million/t, while in 2021 they reached the level of 1.9 million/t (which is 0.6 million/t more than the ending stocks in 2020 and for about 0.7 mil./t more than the final stocks in 2021).

Based on the Report of the Republic Bureau of Statistics (RZS), the foreign trade exchange of sunflower for the time period from 2019 to 2021 is shown in Table 6 [USDA, Sunflower Market Report, 2021]:

Table 6. Foreign trade exchange of sunflowers on the domestic market (2019-2021) u hilj./t

| Sunflower | | | | |
|-----------|--------|--------|-------|---------|
| Year | Import | Export | Saldo | RCA (%) |
| 2019 | 29 | 135 | 106 | 64,6 |
| 2020 | 19 | 120 | 101 | 72,7 |
| 2021 | 20 | 110 | 90 | 69,2 |

In Table 6, we analyze the foreign trade balance in the import and export of sunflowers and the index of discovery of comparative advantages (RCA). The foreign trade balance is positive in all three analyzed years and is obtained as the difference between exports and imports, and what is interesting is that in all three years it amounted to 0.2 thousand/t. RCA in 2019 was about 65% and was calculated based on the data in Table 6 as follows: $RCA=(135-29):(135+29)=0.646$. RCA in 2020 was about 73% and was calculated based on the data from Table 6 as follows: $RCA=(120-19):(120+19)=0.727$. RCA in 2021 was 69% and was calculated based on the data in Table 6 as follows: $RCA=(110-20):(110+20)=0.692$. Based on the obtained results, we note that RCA was positive in all three analyzed years, which represents a surplus in exports. Import and export of sunflowers on the domestic market based on the data from table 6 are shown in graph 2.

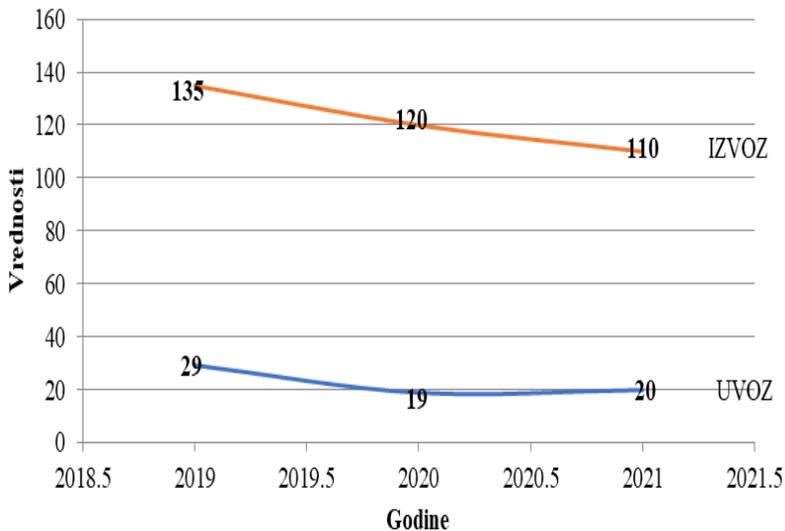


Chart 2. Import-export of sunflower on the domestic market (2019-2021) u – hilj./t
Source: USDA, 2021 Sunflower Market Report (based on author's calculations)

According to the claims of analysts from UkrAgroConsult, the export of sunflower oil from Ukraine in the period September-June 2020/2021. was 4.75 million/t, which is 17.6% less compared to the same period of the previous year. Deliveries were made to the main export markets, such as China, India and the countries of the European Union. Export growth was registered in China (21%) and on the markets of Switzerland (219%), Portugal (221%) and Saudi Arabia (23%) [<http://www.minpolj.gov.rs/download/izvestaj-o-sunflower-market-July-2021/>]. Sunflower meal is mostly exported to the European Union (94%), where the most common destinations are Italy and Croatia. In October 2021, sunflower was traded at a price of 59.50 din/kg to 59.70 din/kg without VAT. Weak supply of this oilseed is noticeable, which led to a price increase of 0.22%. The new rise in oil prices in Europe, fueled by the rise in palm oil prices and the energy market, leads to a strengthening of the growth of the oilseeds market [Gajdobranski and a group of authors, 2021]. At the beginning of December 2021, sunflower was traded at a price of 59.50 din/kg to 59.70 din/kg without VAT. The weak supply of this oilseed is noticeable, which led to a price increase of 0.22% [<https://seedevo.org/publikacije/SEEDVO%20Cene%20agricultural%20proizvoda%20u%202020.pdf>]. The last concluded price with VAT (DIN/kg) of

sunflower seeds 33% on the Product Exchange in Novi Sad on 01/22/2022 was 36 dinars/kg.

The purchase of sunflowers is seasonal, and in the period from August to October, 70 to 75% of the total amount of sunflowers is purchased. The international food market in 2022 is very unstable, especially when you take into account the conflicts between the world's major food suppliers and the world's largest producers of sunflowers and sunflower oil - Ukraine and Russia. These two countries account for about 80% of the world's sunflower oil exports, which is of particular concern to traders, as importers would be forced to replace supplies from the region. Thus, interruptions in supply from the Black Sea region would affect overall global availability, and buyers in the Middle East and Africa would look for other alternative sources for importing sunflower oil [<https://biznis.telegraf.rs/agro-biz/3462756-preti-if-holy-hunger-just-jumped-the-price-of-wheat-corn-and-soybean-war-is-shaking-the-planet>]. Ukraine is the leading country in the export of sunflower oil and sunflower meal, while Russia is the world's largest exporter of sunflower seeds. Analysts estimated that the growth of temporary stocks of sunflowers would be as high as 45% and at the end of 2022 would amount to around 2.8 million/t. A relatively small number of countries are involved in the intensive production of sunflowers and sunflower oil, and the reasons for this are the war situation in Ukraine, the Covid-19 crisis, demand, more expensive transportation, and a smaller crop in most countries.

CONSLUSION

By analyzing the numerical data of oil crops in the world, we see that soybean is produced the most, followed by oilseed rape, while sunflower, which is the main oil crop in the Republic of Serbia, is in third place. From 2015 to 2019 at the world level, about 60% of the total oilseeds produced are soybeans, followed by rapeseed about 13%, sunflower about 8%, peanuts about 8%, cotton about 7.5% and other oilseeds about 4%. The trade balance and competitive comparisons of one country in trade with other countries can most accurately be examined by revealed comparative advantages using the RCA-index, for all countries of the world that we have analyzed in detail in the work on the example of soybeans and sunflowers and

their products. It is noticeable that in the world, the trade is mainly carried out in crude and edible oil and sunflower. Crude oil with a value of around \$3 billion per year is traded the most. Sunflowers are grown in the world on about 24 mil./ha and 31 mil./t are produced on them. Most in Europe (65 percent), where Russia and Ukraine lead, followed by Asia and South America. A relatively small number of countries are involved in the intensive production of sunflower and sunflower oil, so trade is intensive. In the future, it is necessary to change the structure of the export of these products, in order to increase competitiveness and eliminate restrictions as a result of inadequate agricultural policy.

Soybean prices on the international market rose, which was influenced by the increase in Chinese demand, while buyers moved from the US market to Brazil, which contributed to the strengthening of the Brazilian price. According to the projections of the US Department of Agriculture for the year 2022, the growth of soybean production in the world is predicted to be 5.55%, in line with the growth of production and exports to Brazil and the USA. On the Product Exchange in Novi Sad, the price of soybeans in September amounted to 73.13 din/kg without VAT, which is even 70% more than the price in the same period of 2020. In the same period on the Product Exchange in Novi Sad in October 2021, sunflower was traded at a price of 59.50 din/kg to 59.70 din/kg without VAT. Weak supply of this oilseed is noticeable, which led to a price increase of 0.22%. The new rise in oil prices in Europe, fueled by the rise in palm oil prices and the energy market, is leading to stronger growth in the oilseeds market. The increase in the price of oil is a consequence of events on the world stock market, so it is realistic to expect new price increases in 2022. In this case, the state reacts to the stabilization of prices through commodity reserves.

Based on the analysis of the index of revealed comparative advantages (RCA), it was observed that exports are greater than imports, but despite this, world agricultural production today is characterized, on the one hand, by food hyperproduction and market surpluses, and on the other hand, by food shortages and hunger. Today, in the conditions of Covid-19, this gap is deepening even more, which is why it was necessary to carry out a more detailed analysis of the trade balance, where the emphasis in the work was placed on soybeans and sunflowers as the two most important oilseeds. Given that the Covid-19 pandemic affected international trade, a smaller drop in imports and exports at the world level was

estimated, and an increase in domestic consumption (both grains and sunflower oil and soybean meal), which had a significant impact on price growth and insufficient competitiveness on the foreign market.

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