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## ASSESSING THE AGRICULTURAL TRADE COMPLEMENTARITY OF THE CZECH REPUBLIC AND COUNTRIES IN WESTERN BALKAN

### SUMMARY

The article interrogates the complementarity of agrarian trade between the Czech Republic and Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia applying the Trade Complementarity Index. Analyzing the last decade, the results indicate two-way complementarity of agrarian trade between the Czech Republic and North Makedonia and Montenegro. Due to the changes in the exports and import structure during the period under scrutiny, Serbia and Albania have also become complementary to the agrarian trade of the Czech Republic and vice versa. The Czech Republic's agrarian exports are also complementary to Bosnia and Herzegovina's agrarian imports. Generally, the results support the ongoing liberalization process between the EU and the Western Balkans and the rationale for the cooperation of the Czech Republic with Western Balkan countries and taking advantage of existing economic resources in the segment of agrarian products. However, results also indicate existing barriers to developing more intensive agrarian trade between the Czech Republic and countries of the Western Balkans.

**Keywords:** Economic integration, Foreign trade, Trade complementarity index, Agrarian trade, the Western Balkans

### INTRODUCTION

Economic and trade integration became a vital component of the economic development of countries in the Western Balkans. It is mostly the regional CEFTA agreement as well as trade agreements with EU countries that are forming the shape of Western Balkan countries' trade (Matkovski et al., 2022).

Current geopolitical dynamics following Russia's aggression against Ukraine have led to a strengthening of the strategic interaction and enhanced European Union's (EU) engagement with the Western Balkans. Currently, the EU

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has reiterated that is fully committed to the integration of the Western Balkans (EC, 2023). All countries of the Western Balkans have applied for EU accession (Croatia has already become an EU member state in 2013). North Macedonia has got the status of candidate country since 2005, Montenegro since 2010, Serbia since 2012, Albania since 2014, and Bosnia and Herzegovina since 2022 (EC, 2023). Although all countries formally have candidate status, they are in different stages of the negotiation process. There are geopolitical, security and other motivations for such integration; nonetheless the economic determinants of economic integration play fundamental role.

The agrarian trade is natural and important part of this dynamic. Agriculture sectors play a vital role in economic, employment and trade structures in all Western Balkan countries, and are contributing to economic as well as social stability.

The European Union is already playing a vital role in Western Balkan countries' trade as well as is playing an important role in the further integration of the Western Balkan region into the economic and political structures of the European region.

In this context, it is important to analyse welfare effects linked to this liberalization process and evaluate the rationale for the cooperation between Western Balkan countries and European Union and its member states. Against this backdrop, there is still gap in literature dealing with trade complementarity of Western Balkan countries and EU member states. Also, agrarian trade is typically a sensitive part of negotiations because of the potential impacts on food security and on rural areas.

This article aims to analyse the level and changes in agrarian trade complementarity of countries in Western Balkan (those that are potential EU member states) and the Czech Republic in the last decade. This study uses the example of the Czech Republic as an EU member state and EU candidate states from Western Balkan to shed light on the reasoning and effects of this specific economic cooperation.

### **Agricultural trade in the Western Balkans**

Most countries of the Western Balkans (except Albania) became independent after the collapse of the former Socialist Federal Republic of Yugoslavia (SFRY), at the beginning of the 90s of the XX century. The countries of the former Yugoslavia, which had a long history of trade exchange within the same state, continued to trade with each other. The establishment of the Central and Eastern Europe Free Trade Agreement (CEFTA) also contributed to the maintenance of mutual trade (Ćejvanović *et al.*, 2014) between countries that used to be part of the same country and are now part of CEFTA.

Volk *et al.* (2012) claim that most the Western Balkans have quite high but unused potential for agriculture. It is worth noting that, as pointed out by Mizik (2012), the agrarian sectors in the Western Balkans face many challenges as unbalanced sectoral production, fragmented structure of farms, relatively low

yields and generally low level of agricultural productivity, and unfavourable export structure because a gap when compare hygiene and quality controls to the EU standards.

The analysis of agrarian trade for the mentioned countries in Western Balkan was done by numerous authors (Ćejvanović et al., 2014; Hodo, 2014; Jovanović and Despotović, 2014; Jovanović et al., 2015; Braha et al., 2017; Matkovski et al., 2017; Matkovski et al., 2018; Milovanović et al., 2018; Marković et al., 2019; Mrdalj et al., 2019; Brkić et al., 2021; Matkovski et al., 2021) applying different methodologies, and calculating different indices of foreign trade exchange, mainly those related to determining the competitiveness of an individual country in foreign trade in agricultural and food products.

Matkovski et al. (2017) analysed the effects of trade liberalization on the performances of foreign trade in agrarian products and found that liberalization had a positive effect on the intensification of Serbia's foreign trade with other CEFTA and EU countries. Matkovski et al. (2021) concluded that all Western Balkan countries, except Albania, have comparative advantages in exporting agrarian products. They suggest that all Western Balkan countries should improve positions of their agrarian products on the EU market already during pre-accession negotiations for EU membership and increase the level of competitiveness of these products in the EU common market. However, despite positive effects of liberalization of the agrarian trade, all Western Balkan countries have a lower level of competitiveness when compared to the EU countries. Matkovski et al., (2018) show that changes in partial productivity in agriculture have a positive impact on the comparative advantage of Western Balkan countries.

Braha et al. (2017) suggest that despite its huge agrarian potential, Albania has achieved trade deficit in the production and trade of agrarian commodities. Ćejvanović et al. (2014) concluded that foreign trade has an impact on the agricultural sector in Bosnia and Herzegovina. Brkić et al. (2021) found low intensity and vertical nature of the agrarian intra-industry trade of Bosnia and Herzegovina with the EU countries. Milovanović et al. (2018) found that Bosnia and Herzegovina's agrarian exports and imports have been increasing recently, while the volume of agrarian exports have a higher growth rate than of imports. Mrdalj et al. (2019) analysed the agrarian trade of poultry, pork and beef meat between Bosnia and Herzegovina and the rest of the world. All these meat categories revealed comparative disadvantage. Jovanović and Despotović (2014) have found prominent role of agrarian trade in Montenegro's economy due to the high share of the trade deficit in GDP, and high share of agrarian imports in total GDP as well as its high contribution to the total trade deficit. Jovanović et al. (2015) analysed the competitiveness and changes in agrarian foreign trade of the Montenegro from 2006 to 2013. They found that level of self-sufficiency was the lowest one in Montenegro, followed by Albania and Bosnia and Herzegovina.

Natos et al. (2014) studied the extent of agricultural trade complementarity between Western Balkan and EU countries between 2007 and 2012 applying the

Regional Hirschmann index, Sectoral Hirschmann index and the Michaely Index. They conclude lack of agrarian trade complementarity between EU member states in relative geographical proximity to WB and Western Balkan countries, while North-Western EU countries like Finland, Germany, UK or France are displaying greater potentials as future exporting markets for the Western Balkans agrarian exports.

## MATERIAL AND METHODS

The analysis of the changes in agrarian foreign trade between the Czech Republic and countries in the Western Balkan (Bosnia and Herzegovina, Serbia, Montenegro, North Macedonia and Albania) is using data from UNCTAD database (UNCTAD, 2023). Kosovo is not included in the analysis because the database UNCTAD does not provide trade data for this country. Croatia is also not included because the country is already an EU member state. The analysed time series covers the period 2013 – 2022. The focus is on the current period of the agrarian trade dynamic from the post-crisis recovery period after the Great Recession and it also includes the sub-period (2020-2022) when the pandemic of COVID-19 and economic turbulences appeared. The individual agrarian sectors (product groups) are defined according to the Standard International Trade Classification (SITC) Revision 3. Similarly to Hoang (2018), the analysis was carried out with a 3-digit data code, i.e. for 61 different commodity groups of agrarian foreign trade (SITC 0 + 1 + 2 + 4 - 232 - 251 - 266 - 267 - 269 - 27 - 28). The sum of these product groups defines the total agrarian trade in this study. It is therefore rather a broader definition of agrarian trade. The nominal values of the trade flows are in current prices in USD.

The Trade Balance Index (TBI) was employed to analyze the current development, position stages, and dependencies of agrarian trade. The index analyses whether a nation has specialization in export (as net-exporter) or import (as net-importer) for a specific group of products (Verter *et al.*, 2021):

$$TBI_j^i = \frac{x_j^i - m_j^i}{x_j^i + m_j^i} \quad (1)$$

Where, TBI denotes the trade balance index of country *i* for product *j*; *x* and *m* represent exports and imports of product products *j* by nation *i*, respectively. The values of the index range from -1 to +1. Exceptionally, the TBI equals -1 if a nation only imports. On the other hand, the TBI equals +1 if a nation only exports. the country is a “net exporter” of a given food product if the value of TBI is positive. Inversely, the country is a “net importer” of agrarian products if the value is negative.

### Complementarity of trade and its measurement

Traditional trade theories suggest that liberalization of trade leads to welfare-improving trade creation, because the removal of trade barriers

eliminates the domestic sourcing by firms and consumers in some industries in favour of imports that are more efficiently produced in other countries. Contrasting to these generally accepted trade theories, Viner (1950) concluded that the impact of preferential trade liberalization effort is a combination of trade creation effects (welfare gain implications for both partners involved) and of trade diversion effects (reducing the importer country's welfare). Following this argument, the Natural Trading Partners hypothesis is linked to attempts to identify characteristics of states that lead to more trade creation than trade diversion and thus ensure net welfare gains as a result of preferential liberalization agreements.

Proponents of the hypothesis (Lipsey, 1960; Wonnacott and Lutz, 1989; Krugman 1991; Frankel et al., 1995) suggest that natural trading partners are countries (1) significantly trading with each other prior to the agreement and countries close each other and/or (2) the more proximate they are, the less transport costs are limiting the trade flows. Trade agreement among such countries is less likely to be trade-diverting and a preferential trading agreement is more likely to benefit its members. Such an approach has also received criticism as Bhagwati and Panagariya (1997) and Panagariya (1997) questioned such a reasoning, because the larger the initial level of trade between the partners or the closer countries are geographically, the more they will lose from a preferential trading agreement. Krugman (1991) pointed out that the distance and transport costs already does not play such a role due to the technological progress in transport and communication.

Important contribution was made by Schiff (2001). He argued that the definition of natural trading partners should be changed to a situation characterized by the complementarity of countries in trade rather than by substitutability and competition in trade to maintain the theory's predictions. In other words, where a country tends to import what the other country exports. Similarly, Chandran (2010) points out that for the success of any regional trade agreement, it is necessary that the individual economies have complementary trade structures to be exploited for mutual benefit. Complementarity is used to define the extent to which countries have dissimilar resources and patterns of production, and they are likely to trade intensively with each other (Drysdale, 1969).

There are various empirical tools and procedures that are used in trade studies to assess trade complementarity as Export similarity index (Finger and Kreinin, 1979), association between trade competitiveness indices (Jayawickrama and Thangavelu 2010; Hoang 2018), Michaely index (Michaely, 1996), Regional Hirschman index (Mikic and Gilbert, 2009) and Trade complementarity index (TCI) proposed by Drysdale (Drysdale, 1969). Each of these tools assesses the complementarity slightly in a different manner and accents different aspect of complementarity. In this study, we use the Trade complementarity index (Drysdale, 1969). The reason is that this index allows us to assess complementarity both ways (e.g. the Czech Republic's exports to

Albania's imports and vice versa). To assess complementarity, the index also uses not only the export structures but also the import structures.

The main idea of TCI is to measure the extent to which one country's export structure matches another country's import structure more closely than it matches the structure of the world imports.

$$TCI_{ab} = \sum_j^n \left( \frac{X_a^j}{X_a} \times \frac{M_w - M_a}{M_w - M_a^j} \times \frac{M_b^j}{M_b} \right) \quad (2)$$

where  $M_a^j$  and  $M_b^j$  are imports of commodity  $j$  by the countries  $a$  resp.  $b$ ,  $M_a$  and  $M_b$  are total agrarian imports of countries  $a$  resp.  $b$ ,  $M_w^j$  is the world import of commodity  $j$  and  $M_w$  is the total world agrarian import.

The TCI value of unity indicates that the export and import specializations are similar to the world economy specialization and the existence of comparative advantage cannot explain the bilateral trade (Hoang, 2018). The value of TCI greater than (smaller) than unity points to the existence of strong (weak) complementarity between the export specializations of country  $a$  and the import specialization of country  $b$ .

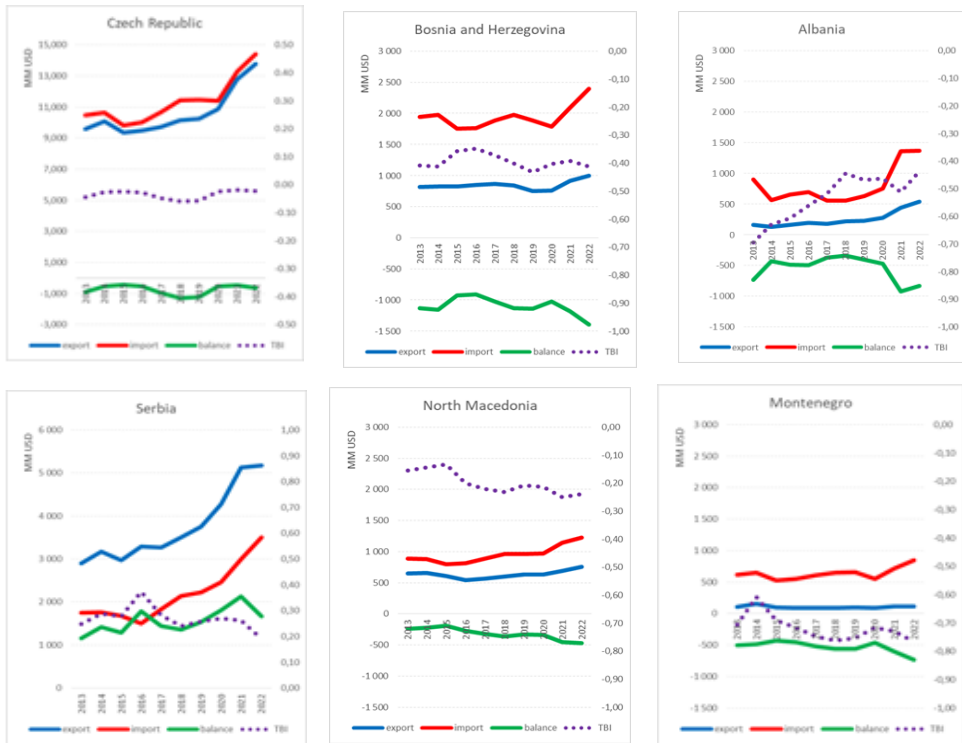
## RESULTS AND DISCUSSION

### Agrarian trade of analyzed countries

The agrarian sector of the Czech Republic is positioned in the structure of the national economy as is typical for developed economies, i.e. with a small share of GDP and the labour force, as the economic centres of gravity are located in other sectors. The Czech Republic's agrarian trade has been characterized by changes since the liberalization after 1992. Important changes in the structure and volumes of traded agrarian products into/from markets of other European countries have also occurred, especially after the Czech Republic joined the European Union in 2004 (Smutka *et al.*, 2018). In 2022, the agrarian exports of the Czech Republic have reached 13.8 billion US dollars, and the agrarian imports 14.4 billion US dollars. The Czech Republic's balance of agrarian trade is negative, nonetheless, the Trade balance index score reached -0.03, indicating that the Czech Republic is a net importer in agrarian trade. However, agrarian exports cover a significant part of the value of agrarian imports. The main markets of Czech agrarian trade are mostly other member states of the European Union (EU is around 90% of exports), specifically Slovakia, Germany, Poland, Italy, Austria and Hungary. These countries represent around 80% of the Czech Republic's agrarian exports to the European Union.

In absolute values, the largest exporter of agrarian products in the Western Balkan region is Serbia (5.2 billion US dollars in 2022), followed by Bosnia and Herzegovina (1.0 billion US dollars), North Macedonia (0.8 billion US dollars), Albania (0.5 billion US dollars), and Montenegro (0.1 billion US dollars). Bosnia and Herzegovina (TBI: -0.39 on average from 2013 to 2022), North Macedonia (TBI: -0.20), Albania (TBI: -0.53), and Montenegro (TBI: -0.72) are positioned

as net importers in agrarian trade. The negative TBI indicates a relatively high dependence on agrarian imports. Serbia is positioned as net exporter.



Source: Authors' construct based on data from UNCTAD (2023)

Figure 1. Dynamics of total agrarian trade of the Czech Republic and particular countries from Western Balkan (2013-2022); export, import balance, TBI; millions USD

The structure of Serbia's agrarian export mostly consists of S044, S058, S122, S057, and S421 (5 most exported products on average from 2013 to 2022). The structure of agrarian imports mostly consists of S057, S098, S071, S122, and S081. These products contribute 43.5% to the value of Serbia's agrarian exports and 32.1% to the value of agrarian imports. The structure of Bosnia and Herzegovina's agrarian export mostly consists of S248, S421, S245, S022, and S058. The structure of agrarian imports mostly consists of S098, S112, S048, S081, and S111. These products contribute 51.6% to the value of Bosnia and Herzegovina's agrarian exports and 31.7% to the value of agrarian imports. The structure of North Macedonia's agrarian export mostly consists of S121, S054, S048, S112, and S057. The structure of agrarian imports mostly consists of S012, S098, S048, S421, and S057. These products contribute 61.7% to the value of North Macedonia's agrarian exports and 33.5% to the value of agrarian imports. The structure of Albania's agrarian exports mostly consists of S054, S037, S058,

S057, and S292. The structure of agrarian imports mostly consists of S048, S041, S057, S111, and S012. These products contribute 61.2% to the value of Albania's agrarian exports and 34.9% to the value of agrarian imports. The structure of Montenegro's agrarian export mostly consists of S112, S248, S016, S246, and S017. The structure of agrarian imports mostly consists of S012, S098, S111, S048, and S022. These products contribute 62.8% to the value of Montenegro's agrarian exports and 39.0% to the value of agrarian imports. This overview points to a relatively high level of specialization in agrarian exports especially in North Macedonia, Albania, and Montenegro as the five most imported agrarian products contribute more than 60% to agrarian exports.

### **Complementarity of agrarian trade between the Czech Republic and Western Balkan**

On average 2013-2022, Western Balkan country's agrarian export structure matches the Czech Republic's agrarian import structure in an almost similar way as it matches the structure of the world agrarian imports. Nonetheless, the TCI scores are steadily increasing during the period reaching 1.15 in 2022. This suggests that agrarian exports from Balkan countries are getting more complementary to the agrarian imports of the Czech Republic than to the world agrarian imports (table 1).

Table 1. Scores of TCI index for country pairs, 2013-2022

From	To	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	13-22
Western Balkan	Czechia	1.01	1.06	1.01	1.03	1.07	1.04	1.04	1.05	1.09	1.15	<b>1.05</b>
Czechia	Western Balkan	1.23	1.28	1.33	1.33	1.31	1.28	1.25	1.28	1.23	1.24	<b>1.27</b>
Albania	Czechia	0.99	1.03	0.98	0.92	0.95	0.96	0.91	0.96	1.04	1.03	<b>0.98</b>
Bos. and Herz.		0.99	1.00	0.95	0.97	0.93	0.91	0.95	0.94	0.99	0.98	<b>0.96</b>
Montenegro		1.14	1.40	1.09	1.03	1.03	1.03	1.06	1.08	1.24	1.10	<b>1.12</b>
N. Macedonia		1.23	1.28	1.19	1.13	1.21	1.14	1.12	1.21	1.13	1.22	<b>1.18</b>
Serbia		0.96	1.02	0.99	1.03	1.09	1.05	1.05	1.05	1.10	1.18	<b>1.05</b>
Czechia	Albania	1.37	1.34	1.35	1.46	1.29	1.30	1.25	1.19	1.26	1.25	<b>1.30</b>
	Bos. and Herz.	1.28	1.26	1.28	1.28	1.27	1.26	1.31	1.31	1.31	1.44	<b>1.30</b>
	Montenegro	1.30	1.25	1.29	1.27	1.29	1.25	1.23	1.26	1.26	1.27	<b>1.27</b>
	N. Macedonia	1.14	1.17	1.19	1.19	1.16	1.15	1.15	1.16	1.13	1.17	<b>1.16</b>
	Serbia	1.06	1.12	1.10	1.12	1.06	1.15	1.16	1.19	1.13	1.16	<b>1.12</b>

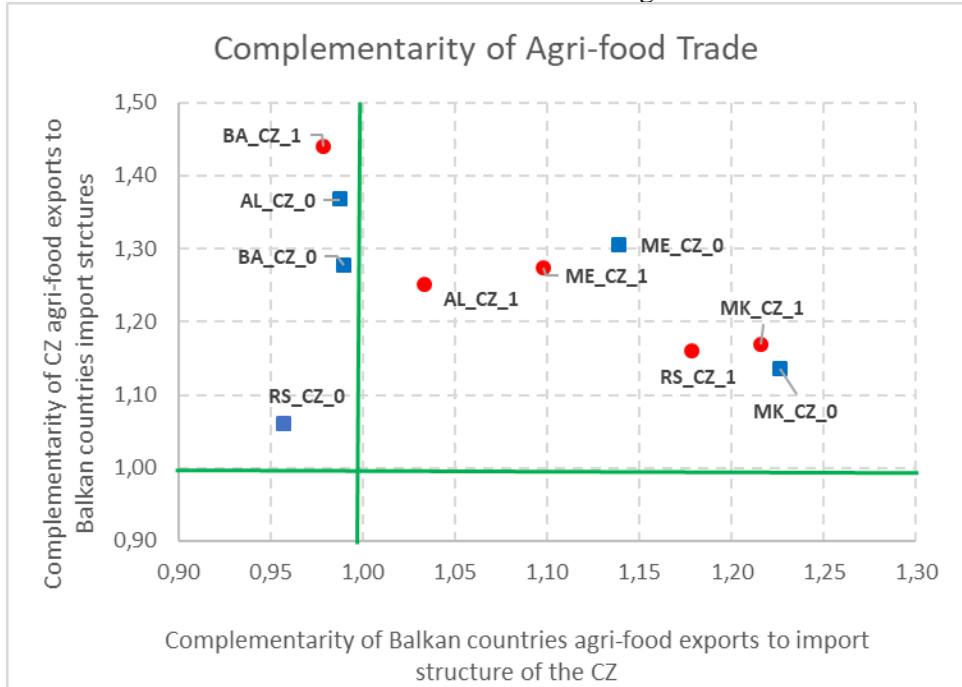
Source: Authors' construct based on data from UNCTAD (2023)

When assessing the agrarian trade complementarity between the Czech Republic and analysing five countries in Western Balkan as a block, the Czech Republic's agrarian exports match even more closely agrarian imports of the Balkan countries as a block, reaching the score of 1.27 on average between 2013



and 2022. These results support the conclusion that the Czech Republic and Bosnia and Herzegovina, Serbia, Montenegro, North Macedonia and Albania as a block are natural trading partners in agrarian trade.

When assessing the complementarity between the Czech Republic and Western Balkan countries on the bilateral level, there is complementarity of the Czech Republic's agrarian export structure to the agrarian import structure of each of these countries. On average between 2013 and 2022, the highest TCI scores reveal the Czech Republic with Albania and Bosnia and Herzegovina (1.30), followed by Montenegro (1,27) North Macedonia (1.16) and Serbia (1.12). The analysis of the change in complementarity shows that in the case of Serbia and Bosnia and Herzegovina, the complementarity has increased. On the other hand, in the case of Albania the complementarity has decreased and remained about the same in the case of Monte Negro and North Macedonia.



Source: Authors' construct based on data from UNCTAD (2023)

Note: AL – Albania, BA – Bosnia and Herzegovina, ME – Montenegro, MK – North Macedonia, RS – Serbia; 0 – year 2013, 1 – year 2022

Figure 2 Complementarity of agrarian trade between the Czech Republic and specific countries from the Western Balkans (avg, 2013-2022); TCI

The second important result is that, on average, the results suggest that Albania's and Bosnia and Herzegovina's agrarian export structures match the world agrarian import structures more than the Czech Republic's agrarian import structures. However, here is important to point out that the TCI scores of Albania and Bosnia and Herzegovina are close to unity and scores are higher than unity in

some of the years. On the other hand, Montenegro's (TCI: 1.12 on avg. 2013-2020) and North Macedonia's (TCI: 1.18 on avg. 2013-2020) agrarian export structures are complementary to the Czech Republic's agrarian import structures. In the case of Serbia, the TCI scores are increasing during the period. Analysis of the complementarity of the agrarian export and import structures between the Czech Republic and Serbia (and vice versa) is signalling improved reciprocal complementarity of Serbian and the Czech Republic's agrarian trade structures.

The reciprocal complementarity of agrarian trade structures between the Czech Republic and analysed Western Balkan countries is presented in figure (figure 2).

It compares the pair complementarity scores between the beginning of the period and the end of the period. If the reciprocal TCI scores are both higher than unity, it represents win-win situation for both the Czech Republic and particular Balkan country (quadrant right-up). Some of pair complementarity scores are present in left-up quadrant. This represents complementarity of the Czech Republic's agrarian exports structures to agrarian import structure of the Balkan country (TCI score y axis is greater than unity), but the analysed Balkan country agrarian export structure is rather more complementary to the World agrarian import structure than to the Czech Republic's agrarian imports structures (TCI score on x axis is smaller than unity).

Since so far there have been no researches and published papers based on them that specifically deal with the complementarity of foreign trade exchange between the countries of the Western Balkans and specifically the Czech Republic (but only general foreign trade exchange between the Western Balkans and the EU), it was not possible to compare the obtained results with the results of other analysis on the same topic.

### **Agrarian Trade between the Czech Republic and Western Balkan Countries**

In 2022, the Czech Republic's agrarian exports to these five Western Balkan countries reached about 102 million USD and the agrarian imports 66 million USD. On average from 2013 to 2022, this trade exchange consists of only 0.4% of the Czech Republic's agrarian exports and 0.3% of the Czech Republic's agrarian imports. Among these Western Balkan countries under scrutiny, the Czech Republic mostly exports to Serbia (51.9% of the Czech Republic's agrarian exports to these Western Balkan countries), and to Bosnia and Herzegovina (29.5%). The Czech Republic mostly imports from Serbia (56.7%), and North Macedonia (26.0%). The Czech Republic mostly exports S098, S022, S112, S048, S247 and these products consist 59.5% of agrarian exports of the Czech Republic to the analysed Western Balkan countries. Analysed Western Balkan countries export products as S057, S054, S081, S058, S421 to the Czech Republic. These five products consist of 55.5 of the exports of these countries to the Czech Republic. The Czech Republic reveals a positive agrarian trade balance with Serbia, Bosnia and Herzegovina, and Montenegro. On the other

hand, the Czech Republic reached a negative agrarian trade balance with North Macedonia and since 2017 also with Albania.

Table 2 Bilateral agrarian trade, 2013-2022, export from the Czech Rep. to WB countries and import to the Czech Republic from WB

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	%
Czech Republic's export to (1000 USD)											
Albania	1,658	1,445	2,200	3,603	2,036	940	1,371	2,138	2,479	8,373	5.2
Bos. and Herz.	5,123	8,706	10,605	9,088	11,592	15,135	17,574	16,868	17,048	37,297	29.5
Montenegro	513	785	738	976	830	766	978	673	1,010	1,182	1.7
N. Macedonia	6,512	5,149	4,753	4,258	4,476	4,888	6,158	5,956	6,554	10,141	11.7
Serbia	20,666	20,400	16,245	18,576	20,992	24,184	29,229	31,266	34,967	45,477	51.9
<b>Suma</b>	<b>34,472</b>	<b>36,485</b>	<b>34,541</b>	<b>36,502</b>	<b>39,857</b>	<b>45,912</b>	<b>55,310</b>	<b>56,901</b>	<b>62,067</b>	<b>102,470</b>	<b>100.0</b>
Czech Republic's import from (1000 USD)											
Albania	1,485	1,343	1,036	1,291	3,898	3,728	4,894	7,202	8,847	10,629	11.4
Bos. and Herz.	1,549	1,247	1,100	1,898	1,449	1,896	2,548	3,026	3,429	4,432	5.8
Montenegro	66	75	31	46	33	53	75	37	47	48	0.1
N. Macedonia	13,411	10,958	10,013	8,684	6,333	9,392	9,987	11,425	9,373	11,144	26.0
Serbia	19,243	17,907	14,143	15,764	14,349	18,104	19,133	24,859	36,772	39,690	56.7
<b>Suma</b>	<b>35,753</b>	<b>31,530</b>	<b>26,323</b>	<b>27,682</b>	<b>26,062</b>	<b>33,172</b>	<b>36,637</b>	<b>46,549</b>	<b>58,467</b>	<b>65,943</b>	<b>100.0</b>

Source: Authors' construct based on data from UNCTAD (2023)

## CONCLUSIONS

This article interrogates the agrarian trade complementarity of countries in the Western Balkans and the Czech Republic to assess the ongoing integration and liberalization processes and the rationale for the economic cooperation.

Agrarian trade is an important part of the development's dynamic of agrarian and food sectors in countries of the Western Balkans and plays a vital role in economic, employment and trade structures in these countries. Countries of the Western Balkans have a long tradition of mutual trade, nonetheless the establishment of the Central and Eastern Europe Free Trade Agreement (CEFTA), trade with EU member states and various trade agreements led to the strengthening of the role of the agrarian trade on the changes in agrarian sectors of Western Balkan countries. This has implications to economic as well as social development and/or stability as countries of the Western Balkans are net importers (except of Serbia) of agrarian products. The international trade is an important mechanism how these countries partially solve their food security. This of course has its potential benefits as well as risks, depending on the dynamic of international agrarian markets. The deepening of political and economic integration with the European Union will further increase the intensity of the agrarian trade. It can be expected that the growing agrarian trade intensity will bring additional set of factors influencing the agrarian sectors in the region of the Western Balkans, similar to the experience of countries in Central and Eastern Europe joining EU in the past two decades. Also, the increase in intensity of Croatian agrarian trade after EU accession can be taken as a benchmark. The further liberalization of trade with EU member states can help Western Balkan countries to increase their export of agrarian commodities and food (while these countries will of course also open its markets to agrarian imports).

We used the Czech Republic as an example to interrogate complementarity of agrarian trade between Western Balkan countries and EU member states. The analysis of agrarian trade complementarity indicates two-way complementarity of agrarian trade for the Czech Republic and North Macedonia and Montenegro. After the changes in the exports and imports structure during the period under scrutiny, Serbia and Albania have also become complementary to the agrarian trade of the Czech Republic and vice versa. The Czech Republic agrarian exports are complemented to agrarian imports of Bosnia and Herzegovina, however, Bosnia and Herzegovina rather match with structure of the world agrarian import than with the one of the Czech Republic. Generally, these results support the ongoing liberalization process and the rationale for the cooperation of the Czech Republic with Western Balkan countries (and vice-versa) and taking advantage of existing economic resources exists in the segment of agrarian products. These results are in line with previously published study from Natos *et al.* (2014).

The analysis of the actual agrarian trade exchange between the Czech Republic and particular countries of the Western Balkans shows rather low values despite existing complementarities. Although these potential trade opportunities exist, there is probably further room for improvement and promotion of mutual agrarian trade. Besides specialized trade and investments agencies, one specific form how the Czech Republic is supporting and promoting mutual agrarian trade with other countries are the dedicated positions of agrarian diplomats. Since 2016, the Czech Republic has placed its agrarian diplomat also in Serbia; the diplomat is also involved in promoting trade with other countries in the region as Montenegro, Bosnia and Herzegovina, and North Macedonia. In general, the task of the agrarian diplomats is mainly to strengthen and support the business cooperation of Czech food producers, farmers and entrepreneurs with partners from the respective countries. Results of this study provide justification and support of this particular policy measure. All Western Balkan countries, except Montenegro, have diplomatic missions in the Czech Republic, and the Czech Republic has diplomatic missions in all WB countries. The most countries of the Western Balkans are small in terms of economic strength, and have a limited number of staff in their embassies (newly established after the collapse of SFRY). The Western Balkan countries have diplomats in charge of strengthening economic cooperation and trade only in large countries, but almost nowhere they have persons exclusively in charge of agrarian trade.

Despite existing effort of the Czech Republic to facilitate and promote the agrarian trade with Western Balkan countries, the results suggest existing barriers to the trade and the nature of these barriers should be the subject of further research.

There are also limitations of our research. The trade complementarity in this paper is defined as extent to which one country's export structure matches another country's import structure more closely than it matches the structure of the world imports. There are other empirical tools and procedures that are used in trade studies to assess trade complementarity. This gives opportunity for further

research by applying these methods and derives more robust results, points of view and policy recommendations.

This article's focus on the agrarian trade complementarity is using the trade between the Czech Republic and EU candidate countries in the Western Balkans as an example. Current strengthening of the strategic interaction and enhanced European Union's engagement with the Western Balkans, and the potential accession of countries in the Western Balkans to the EU increases the importance of this theme of trade complementarity.

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