Changes of EU Countries Positions in the International Trade of Food, Drinks and Tobacco in 2016, 2019 and 2020: Influence of Coronavirus Pandemic

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Abstarct:

Purpose: The purpose of this paper is an explanation of an independency or dependency of particular countries of the European Union on food imports in spite of the fact that EU is net exporter of food. Moreover, the author considers an influence of the coronavirus pandemic on changes of positions of particular EU member-countries in the international trade of food, drinks and tobacco (named food in this article).

Design/Methodology/Approach: The design is finding the influence of the recession of 2020 caused by the corona pandemic on changes of food exports and imports of particular EU countries and perspectives. The research method is a describing political-economic analysis that bases on statistical data. The approach covers a description of relatively stable positions of particular EU countries in international trade of food including importance of food in their exports and imports of all products.

Findings: There were ten net exporters in food in EU in 2016. Most important of them were, The Netherlands, Spain, Poland, France, and Denmark. The first four countries did not change their positions in 2016-2019. However, the quantity of EU net exporters rose to thirteen countries in 2019. EU food surplus increased in spite of the pandemic and recession in 2020. Spain and Poland increased their food trade surplus in 2020 significantly. Britain, the first EU net importer in food leaved European Union on 31 January 2020. Germany advanced from second to first position of the EU net importer of food in 2020. The corona virus pandemic in 2020 did not cause big changes on the position of EU net exporters and had a small influence on the EU international trade in food.

Practical Implications: The result can be considered to elaborate the short-term and long-term EU agricultural and trade policy.

Originality/Value: Original research paper.

Keywords: Food, drinks and tobacco, food security, international trade, coronavirus (covid-19) pandemic, global recession.

JEL Classifications: F19.

Paper type: Research article.

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1. Introduction and Hypothesis

This paper analyzes changes of exports, imports and trade balance in food, drinks and tobacco (named food in this article) of EU country-members in 2016, 2019 and 2020. Some countries of the European Union are still dependent on food imports in spite of the fact that EU is a net exporter of food. This situation is connected with a competitiveness of EU net exporters of food and with the EU policy to ensure the food security.

Britain was the biggest EU net importer and lowered the EU surplus in food trade until January 31, 2020, i.e., until the Brexit. This article tries to prove the hypothesis that recession caused by the coronavirus (covid-19 pandemic) had no big influence on changes of the EU countries' positions in the international food trade.

2. The Importance of International Food Trade for the European Union

International trade in food is important for all countries because of the strategic importance of these commodities (Josling *et al.*, 2010). Authorities of the European Union and the United States of America understand the global importance of the food security. Therefore, agricultural production and international food trade are regulated by these powers (Daviron and Douillet, 2014). European Union protects agriculture and international food trade in spite of the global tendencies to liberalize the international trade (Markocic and Markocic, 2014; Staszczak, 2012). The United States concerns about an important growth of competition from EU in the international food trade (Fajardo, 2016). Initial fears of a collapse in the international food trade because of the covid-19 pandemic did not materialize (Carreno *et al.*, 2020). A long term advantages from the trade can be achieved by high quality food products and marketing (Canavari *et al.*, 2009).

3. Changes of Positions of EU Net Exporters of Food in 2016, 2019 and 2020. International Trade Balance in Food within the Background of International Trade Balance in All Goods

European Union was net exporter of food in 2016 with the trade balance amounting to 32.9 billion euro, (except Britain). EU-27 was net exporter of all products with the trade surplus amounting to 264.3 billion euro. There were ten net exporters of food in 2016 as follows:

- 1/ The Netherlands that achieved the trade balance in food amounting to 23.4 billion euro, (this country was the second EU net exporter of all products (after Germany) with the trade surplus amounting to 63.2 billion euro),
- 2/ Spain 11.0 billion euro, (this country was the third EU net importer of all products with the trade balance amounting to -19.0 billion euro),
- 3/ Poland 7.8 billion euro, (this country was the EU net exporter of all products with the trade surplus amounting to 3.9 billion euro),

- 4/ France 6.6 billion euro, (this country was the second EU net importer of all products [after Britain] with the trade balance amounting to -60.0 billion euro),
- 5/ Denmark 5.4 euro,
- 6/ Belgium 5.1 billion euro,
- 7/ Ireland 3.8 billion euro,
- 8/ Hungary 2.0 billion euro,
- 9/ Lithuania 1.0 billion euro,
- 10/Bulgaria 0.6 billion euro, (Eurostat, 2022).

European Union (27 countries, i.e., except Britain) increased the trade surplus in all products by the surplus in trade of food. Netherlands increased the trade surplus in all goods by the surplus in trade of food. Poland obtained the trade surplus in all products because of the relatively big surplus in trade of food. Spain and France reduced the trade deficit in all goods by the trade surplus in food in 2016.

European Union was net exporter of food in 2019 with the trade balance amounting to 45.4 billion euro, (except Britain). EU-27 was net exporter of all products with the trade balance amounting to 191.1 billion euro. There were thirteen net exporters of food in 2019 as follows:

- 1/ Netherlands that achieved the trade balance in food amounting to 25.1 billion euro, (this country was the second EU net exporter of all products [after Germany] with the trade balance amounting to 65.2 billion euro),
- 2/ Spain 13.5 billion euro, (this country was the third EU net importer of all products with the trade balance amounting to -34.6 billion euro),
- 3/ Poland 11.4 billion euro, (this country was the EU net exporter of all products with the trade balance amounting to 1.2 billion euro),
- 4/ France 8.4 billion euro, (this country was the second EU net importer of all goods [after Britain] with the trade balance amounting to -74.7 billion euro),
- 5/ Belgium 7.1 billion euro,
- 6/ Denmark 5.3 billion euro,
- 7/ Ireland 4.6 billion euro,
- 8/ Italy 3.2 billion euro,
- 9/ Hungary 2.0 billion euro,
- 10/ Lithuania 1.2 billion euro,
- 11/Bulgaria 0.6 billion euro,
- 12/ Austria 0.1 billion euro,
- 13/ Latvia 0.1 billion euro, (Eurostat, 2022).

The first four countries did not change their positions in 2016-2019. Belgium advanced from sixth to fifth position with a growth of food trade surplus. Denmark dropped from fifth to sixth position with a small decrease of food trade surplus. Italy advanced from tenth net importer in 2016 to eighth net exporter in 2019. Austria advanced from net importer position in 2016-2018, (Eurostat, 2022) to twelfth net

exporter in 2019. Latvia advanced from net importer position in 2016-2018, (Eurostat, 2022) to thirteenth net exporter in 2019.

Trade surplus in food in 2019 had the same influence on total trade balance of EU-27 and major EU food net exporters like in 2016.

European Union was net exporter of food in 2020 with the trade balance amounting to 53.3 billion euro, excluding United Kingdom that withdrew from the EU on 31 January 2020. EU-27 was net exporter of all products with the trade balance amounting to 215.1 billion euro. EU trade surplus of food and all goods increased in spite of the pandemic and the global recession. There were thirteen net exporters of food in 2020 as follows:

- 1/ Netherlands that achieved the trade balance in food amounting to 25.0 billion euro, (this country was the third EU net exporter of all products [after Germany and Ireland] with the trade balance amounting to 69.5 billion euro),
- 2/ Spain 17.9 billion euro, (this country was the EU net importer of all products with the trade balance amounting to -15.7 billion euro)
- 3/ Poland 12.5 billion euro (this country was the EU net exporter of all products with the trade balance amounting to 10.6 billion euro),
- 4/ France 6.6 billion euro (this country was the first net importer of all products [because of the Brexit] with the trade balance amounting to -81.3 billion euro),
- 5/ Belgium 6.6 billion euro,
- 6/ Italy 5.5 billion euro,
- 7/ Denmark 5.4 billion euro.
- 8/ Ireland 3.9 billion euro,
- 9/ Hungary 2.2 billion euro,
- 10/ Lithuania 1.7 billion euro,
- 11/ Austria 0.6 billion euro,
- 12/ Bulgaria 0.4 billion euro,
- 13/ Latvia 0.1 billion euro, (Eurostat, 2022).

The first five net exporters of food maintained their positions in 2019-2020 in spite of coronavirus pandemic. Italy advanced from eight net exporter in 2019 to sixth position in 2020. Italy achieved the first food trade surplus amounting to 0.2 billion euro in 2017 and its surplus rose rapidly in 2018, 2019 and 2020, (Eurostat, 2022) in spite of the covid-19 pandemic. Spain and Poland increased their food trade surplus significantly but France and Belgium decreased their food trade surplus significantly in 2020. The covid-19 pandemic had no important influence on international food trade of most EU net exporters. The changes in food trade surplus were connected with a competitiveness of food production in particular countries.

There is the interpretation problem of the results of Netherlands, i.e., the first EU net exporter of food because of the fact that the Dutch trade data does not include a distinction between total imports and retained imports or country exports and re-

exports. According to estimates, re-exports account for about 50% of total Dutch exports. Therefore, re-exports of food are an important but strictly unknown part of the Dutch food exports, (Gehlhar, 2010).

Trade surplus in food in 2020 had the same influence on total trade balance of EU-27 and major EU food net exporters like in 2019.

4. Changes of Positions of EU Net Importers of Food in 2016, 2019 and 2020. International Trade Balance in Food within the Background of International Trade Balance in All Goods

There were eighteen net importers of food in 2016. The most important net importers were as follows:

- 1/ United Kingdom that achieved the trade balance in food amounting to -26.5 billion euro, (this country was the first EU net importer of all products with the trade balance amounting to -203.1 billion euro),
- 2/ Germany -8.4 billion euro, (this country was the first EU net exporter of all products with the trade balance amounting to 251.7 billion euro),
- 3/ Sweden -5.7 billion euro,
- 4/ Finland -3.0 billion euro,
- 5/ Portugal -2.8 billion euro,
- 6/ Slovakia -1.3 billion euro,
- 7/ Romania -1.2 billion euro,
- 8/ Luxembourg -1.1 billion euro,
- 9/ Greece -1.0 billion euro,
- 10/ Italy -1.0 billion euro,
- 11/ Czechia -0.8 billion euro,
- 12/ Slovenia -0.8 billion euro,
- 13/ Slovakia -0.8 billion euro, (Eurostat, 2022).

Britain deepened the trade deficit in all goods by the deficit on trade in food. Germany reduced the trade surplus in all goods by the deficit on trade in food in 2016.

There were fifteen net importers of food in 2019. The most important net importers were as follows:

- 1/ United Kingdom that achieved the trade balance in food amounting to -27.3 billion euro, (this country was the first EU net importer of all products with the trade balance amounting to -200.2 billion euro),
- 2/ Germany -10.7 billion euro, (this country was the first EU net exporter of all products with the trade balance amounting to 228.3 billion euro),
- 3/ Sweden -5.8 billion euro,
- 4/ Portugal -3.4 billion euro,
- 5/ Finland -3.0 billion euro,

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6/ Slovakia -1.8 billion euro,
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- 7/ Czechia -1.7 billion euro,
- 8/ Romania -1.6 billion euro,
- 9/ Luxembourg -1.2 billion euro,
- 10/ Greece -1.2 billion euro,
- 11/ Slovenia -0.8 billion euro, (Eurostat, 2022).

The first three net importers did not change their positions in 2016-2019. Portugal advanced from fifth to fourth position and Finland dropped from fourth to fifth position. Czechia advanced from eleventh to seventh position. Italy transferred from net importer to eight net exporter. Britain and Germany dropped their food trade deficit significantly.

Trade deficit in food in 2019 had the same influence on total trade balance of major EU food net importers like in 2016.

There were fourteen net importers of food in 2020 (except United Kingdom because of Brexit on 31 January 2020). The most important net importers were as follows:

- 1/ Germany that achieved the trade balance in food amounting to -12.7 billion euro, (this country was the first EU net exporter of all products with the trade balance amounting to 183.7 billion euro),
- 2/ Sweden -5.4 billion euro,
- 3/ Finland -2.9 billion euro,
- 4/ Portugal -2.8 billion euro,
- 5/ Romania -2.1 billion euro.
- 6/ Slovakia -1.7 billion euro,
- 7/ Luxembourg -1.3 billion euro,
- 8/ Czechia -1.2 billion euro,
- 9/ Slovenia -0.7 billion euro,
- 10/ Greece -0.1 billion euro, (Eurostat, 2022).

Britain, the first net importer in the analyzed period, leaved European Union in 2020. Britain lowered the food trade balance of EU until 2019. In this way, Germany obtained the first position from the second place and Sweden advanced from third to second position. Germany dropped its food trade deficit significantly. Greece reduced its trade deficit in food significantly. There were small changes in food trade deficit of other countries in 2020.

Trade deficit in food in 2020 had the same influence on total trade balance of major EU food net importers like in 2019.

The covid-19 pandemic had no important influence on international food trade of most EU net importers. Germany depends on imports of food traditionally. A big reduction of Greek food trade deficit could be connected with a growing competitiveness of

domestic production and with concerns of customers about imported food during the pandemic.

5. Positions of the EU Particular Major Countries in the Exports of Food. Importance of Food Exports in the Total Exports in 2016, 2019 and 2020

The EU major countries obtained the following positions in the value of exports of food, drinks and tobacco in 2016:

- 1/ Netherlands that achieved the value of food exports amounting to 69.5 billion euro (i.e. 13.5% of Dutch total exports amounting to 515.9 billion euro),
- 2/ Germany 65.7 billion euro (i.e., 5.4% of German total exports amounting to 1205.5 billion euro),
- 3/ France 54.2 billion euro (i.e., 12.0% of French total exports amounting to 453.1 billion euro).
- 4/ Spain 40.0 billion euro (i.e., 15.3% of Spanish total exports amounting to 262.0 billion euro),
- 5/ Belgium 34.9 billion euro (i.e., 9.7% of Belgian total exports amounting to 359.8 billion euro).
- 6/ Italy 34.8 billion euro (i.e., 8.3% of Italian total exports amounting to 417.3 billion euro).
- 7/ United Kingdom 24.6 billion euro (i.e., 6.6% of British total exports amounting to 369.9 billion euro),
- 8/ Poland 22.9 billion euro (i.e., 12.4% of Polish total exports amounting to 184.2 billion euro),
- 9/ Denmark 16.1 billion euro (i.e., 18.7% of Danish total exports amounting to 86.1 billion euro),
- 10/ Ireland 11.4 billion euro (i.e., 9.6% of Irish total exports amounting to 118.2 billion euro), (Eurostat, 2022).

The biggest importance of food exports in total exports was in Denmark, Spain, Netherlands, Poland and France. The smallest importance of food exports in total exports was in Germany and Britain in 2016.

The EU major countries obtained the following positions in the value of exports of food, drinks and tobacco in 2019:

- 1/ Netherlands that achieved the value of food exports amounting to 77.1 billion euro (i.e., 12.2% of Dutch total exports amounting to 633.0 billion euro),
- 2/ Germany 69.3 billion euro (i.e. 5.2% of German total exports amounting to 1330.4 billion euro),
- 3/ France 59.6 billion euro (i.e., 11.7% of French total exports amounting to 509.9 billion euro),

- 4/ Spain 46.8 billion euro (i.e., 15.7% of Spanish total exports amounting to 298.3 billion euro),
- 5/ Italy 41.3 billion euro (i.e., 8.6% of total Italian exports amounting to 480.3 billion euro),
- 6/ Belgium 38.1 billion euro (i.e., 9.5% of Belgian total exports amounting to 399.1 billion euro),
- 7/ Poland 30.2 billion euro (i.e., 12.7% of Polish total exports amounting to 238.2 billion euro),
- 8/ United Kingdom 27.1 billion euro (i.e., 6.4% of British total exports amounting to 419.8 billion euro),
- 9/ Denmark 17.3 billion euro (i.e., 17.4% of Danish total exports amounting to 99.2 billion euro),
- 10/ Ireland 13.4 billion euro (i.e., 8.8% of Irish total exports amounting to 151.5 billion euro), (Eurostat, 2022).

The biggest importance of food exports in total exports was in Denmark, Spain, Poland, Netherlands and France. The smallest importance of food exports in total exports was in Germany and Britain in 2019.

The first four exporters did not change their positions in 2016-2019. Italy advanced from sixth to fifth position and Belgium dropped from fifth to sixth position. Poland advanced from eight to seventh place and Britain dropped from seventh to eight place. The first eight countries increased their nominal value of food exports.

The EU major countries obtained the following positions in the value of exports of food, drinks and tobacco during the coronavirus pandemic in 2020:

- 1/ Netherlands that achieved the value of food exports amounting to 76.5 billion euro (i.e., 13.0% of Dutch total exports amounting to 590.2 billion euro),
- 2/ Germany 68.0 billion euro (i.e., 5.6% of German total exports amounting to 1209.2 billion euro),
- 3/ France 57.2 billion euro (i.e., 13.4% of French total exports amounting to 427.2 billion euro),
- 4/ Spain 48.5 billion euro (i.e., 18.0% of Spanish total exports amounting to 269.5 billion euro),
- 5/ Italy 42.6 billion euro (i.e., 9.7% of total Italian exports amounting to 436.7 billion euro),
- 6/ Belgium 37.4 billion euro (i.e., 10.1% of Belgian total exports amounting to 369.6 billion euro),
- 7/ Poland 32.4 billion euro (i.e., 13.5% of Polish total exports amounting to 239.2 billion euro),
- 8/ Denmark 17.0 billion euro (i.e., 17.9% of Danish total exports amounting to 95.0 billion euro),
- 9/ Ireland 13.0 billion euro (i.e., 8.2% of Irish total exports amounting to 157.8 billion euro), (Eurostat, 2022).

The first seven countries did not change their position. There was no data for United Kingdom because of Brexit. Spain and Poland increased their value of food exports in 2020. Other countries decreased their value of food exports during the pandemic. However, there were no big changes of food exports value for the EU countries. Coronavirus had no important influence on food exports of EU countries.

Poland and Ireland increased their value of total exports in 2020. Other countries decreased their value of total exports during the pandemic significantly. Covid-19 had an important and negative influence on total exports of EU countries.

Small changes in food exports and relatively big decrease of total exports caused a little growth of share of food exports in the total exports of most EU countries, except Denmark and Ireland.

6. Positions of the EU Particular Major Countries in the Imports of Food. Importance of Food Imports in the Total Imports in 2016, 2019 and 2020

The EU major countries obtained the following positions in the value of imports of food, drinks and tobacco in 2016:

- 1/ Germany that achieved the value of food imports amounting to 74.2 billion euro (i.e., 7.8% of German total imports amounting to 953.8 billion euro),
- 2/ United Kingdom 51.2 billion euro (i.e., 8.9% of British total imports amounting to 575.1 billion euro);
- 3/ France 47.5 billion euro (i.e., 9.3% of French total imports amounting to 513.1 billion euro),
- 4/ Netherlands 46.1 billion euro (i.e., 10.2% of Dutch total imports amounting to 452.8 billion euro),
- 5/ Italy 35.7 billion euro (i.e., 9.7% of Italian total imports amounting to 367.6 billion euro).
- 6/ Belgium 29.8 billion euro (i.e., 8.7% of Belgian total imports amounting to 342.8 billion euro).
- 7/ Spain 29.0 billion euro (i.e., 10.3% of Spanish total imports amounting to 281.1 billion euro),
- 8/ Poland 15.1 billion euro (i.e., 8.4% of Polish total imports amounting to 180.3 billion euro),
- 9/ Sweden 14.4 billion euro (i.e., 11.3% of Swedish total imports amounting to 127.5 billion euro),
- 10/ Austria 10.7 billion euro (i.e., 7.5% of Austrian total imports amounting to 142.5 billion euro),
- 11/ Denmark 10.7 billion euro (i.e., 13.8% of Danish total imports amounting to 77.3 billion euro), (Eurostat, 2022).

The biggest importance of food imports in total imports was in Denmark, Sweden, Spain and Netherlands. The smallest importance of food imports in total imports was in Austria and Germany in 2016.

The EU major countries obtained the following positions in the value of imports of food, drinks and tobacco in 2019:

- 1/ Germany that achieved the value of food imports amounting to 79.9 billion euro (i.e., 7.2% of German total imports amounting to 1102.1 billion euro),
- 2/ United Kingdom 54.5 billion euro (i.e., 8.8% of British total imports amounting to 619.7 billion euro),
- 3/ The Netherlands 52.0 billion euro (i.e., 9.2% of Dutch total imports amounting to 567.9 billion euro),
- 4/ France 51.3 billion euro (i.e., 8.7% of French total imports amounting to 584.7 billion euro),
- 5/ Italy 38.1 billion euro (i.e., 9.0% of Italian total imports amounting to 424.2 billion euro).
- 6/ Spain 33.3 billion euro (i.e., 10.0% of Spanish total imports amounting to 332.9 billion euro),
- 7/ Belgium 30.9 billion euro (i.e., 8.1% of Belgian total imports amounting to 383.1 billion euro),
- 8/ Poland 18.7 billion euro (i.e., 7.9% of Polish total imports amounting to 237.0 billion euro),
- 9/ Sweden 14.7 billion euro (i.e., 11.3% of Swedish total imports amounting to 142.0 billion euro).
- 10/ Denmark 12.0 billion euro (i.e., 13.8% of Danish total imports amounting to 87.6 billion euro),
- 11/ Austria 11.9 billion euro (i.e., 7.5% of Austrian total imports amounting to 165.0 billion euro), (Eurostat, 2022).

All countries increased their nominal value of food imports. The first two importers, i.e., Germany and Britain maintained their positions in 2016-2019. The Netherlands advanced from fourth to third position and France dropped from third to fourth place. Spain and Belgium swapped places with the sixth and seventh.

There was a relatively small share of food imports in the total imports of EU countries. The biggest importance of food imports in total imports was in Denmark, Sweden, Spain and The Netherlands. The smallest importance of food imports in total imports was Germany and Austria in 2019. This situation is almost unchanged compares to 2016.

The EU major countries obtained the following positions in the value of imports of food, drinks and tobacco in 2020:

- 1/ Germany that achieved the value of food imports amounting to 80.8 billion euro (i.e., 7.9% of German total imports amounting to 1025.5 billion euro),
- 2/ The Netherlands 51.4 billion euro (i.e., 9.9% of Dutch total imports amounting to 520.8 billion euro),
- 3/ France 50.6 billion euro (i.e., 9.9% of French total imports amounting to 508.5 billion euro),
- 4/ Italy 36.1 billion euro (i.e., 9.7% of Italian total imports amounting to 373.4 billion euro),
- 5/ Belgium 30.8 billion euro (i.e., 8.8% of Belgian total imports amounting to 348.0 billion euro),
- 6/ Spain 30.7 billion euro (i.e., 10.8% of Spanish total imports amounting to 285.2 billion euro).
- 7/ Poland 19.9 billion euro (i.e., 8.7% of Polish total imports amounting to 228.7 billion euro),
- 8/ Sweden 14.4 billion euro (i.e., 11.0% of Swedish total imports amounting to 131.2 billion euro).
- 9/ Austria 11.8 billion euro (i.e., 7.8% of Austrian total imports amounting to 150.9 billion euro).
- 10/ Denmark 11.7 billion euro (i.e., 13.7% of Danish total imports amounting to 85.7 billion euro), (Eurostat, 2022).

Germany maintained the first position in food imports in 2020 but this country maintained the position of the first EU net exporter of all goods. Therefore, the German food trade deficit had a relatively little influence on the total trade surplus of this country. There was no data for Britain (the former second food importer) because of Brexit. Germany and Poland increased their value of food imports in 2020. Other countries decreased their value of food imports during the pandemic. However, there were no big changes of food imports value for the EU countries. Coronavirus had no important influence on food imports of EU countries.

All EU country-members decreased their value of total imports during the pandemic significantly. Covid-19 had an important and negative influence on total imports of EU countries.

Small changes in food imports and relatively big decrease of total imports caused a little growth of share of food imports in the total imports of most EU countries, except Denmark and Sweden.

7. Conclusions and Perspectives

The recession caused by the coronavirus (covid-19 pandemic) had a small influence on changes of positions of EU countries in the international trade in food, drinks and tobacco that confirmed the hypothesis. Moreover, the pandemic and the recession caused no big changes of value of trade balance, exports and imports of food for most EU countries.

However, the pandemic caused big changes of value of trade balance, exports and imports of all goods for most EU countries. There is a relatively stable demand for food products that is almost independent of extraordinary phenomena.

According to the author's opinion, the recovery after the pandemic will not cause nor a big growth of a demand for food neither an important changes of positions of UE countries in the international food trade. The slow changes will depend on a competitiveness of food products and on efficiency of an agricultural marketing.

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