EU agricultural policy and its role in smoothing the sustainable development of the EU’s agricultural areas

Yanina Belinska\textsuperscript{1}, Liudmyla Matvejciuk\textsuperscript{2}, Nadiia Shmygot\textsuperscript{3}, Tetiana Pulina\textsuperscript{3}, Dmytro Antoniuk\textsuperscript{4}

\textsuperscript{1}Department of International Economics, University of the State Fiscal Service of Ukraine, 31, Universytetska str. Irpin, 08201, Ukraine
\textsuperscript{2}Department of Tourism and Hotel and Restaurant Affairs, Ivan Ohienko Kamianets-Podilsky National University, Str. 61, Ohienko, City of Kamianets-Podilskyi, 32300, Ukraine
\textsuperscript{3}Department of Management, "Zaporizhzhya Polytechnic" National University, 64 Zhukovsky Str., Zaporizhzhya, 69063, Ukraine
\textsuperscript{4}Department of Entrepreneurship Management of Organisations and Logistics, Zaporizhzhya National University, 66 Zhukovsky street, 69600, Zaporizhzhya, Ukraine
nadezdash@ua.fm

Abstract. The article is devoted to the study of general provisions that form the methodological basis for the impact of changes in the context indicators, the dynamics of the main ones on a global scale, observed the change in the agriculture of EU membership. The forecast analysis showed a low probability of significant changes in the share of agriculture in GDP and exports in all groups of countries, which suggest that differentiation between EU countries in terms of agricultural development, will continue. It is proved, that in the EU there are two opposite trends: convergence, which is stimulated by the CAP to ensure the formation of a single EU agricultural complex, and divergence due to the specialization of countries in the production of those agricultural products for which countries have the most favorable conditions. In addition, significant differences and fluctuations in labour productivity should be noted in agriculture, due to differences in natural conditions in different years, fluctuations in the euro exchange rate, which affects the competitiveness of agricultural products in the world market. These results might also be useful for determination the directions of development and improvement of CAP and for using by other countries comparable to the NMS which experience similar integration issues

1. Introduction
Agriculture is an integral sector of the economy of many countries, plays an important role in economic, social, and environmental development. European agriculture remains an industry with difficult integration conditions, due to different methods and levels of support in different countries of the European Union. As a rule, this sector is more important in developing countries than in industrial and developed ones. The latter are also focused on providing food to their populations, but for developed economies this is a relatively insignificant component of their GDP as compared to the contribution of, for example, the IT and financial services sectors. In developing countries, the share of agriculture in GDP is almost 2 times higher than in developed countries, but this does not necessarily mean that this sector shows the best qualitative and quantitative indicators of agricultural
development. This situation indicates imbalances in the economic space of the EU in general and the development of the agricultural sector in particular.

To smooth the differences between countries in the level of development of their agriculture and ensure the balanced development of the EU agro-sphere, CAP (Common Agricultural Policy) was developed in 1957, which aims to ensure a balanced agricultural development in Europe, strengthen food security and develop organic agriculture. To implement these tasks, the CAP is based on the provision that EU member states must adhere to a common strategy for agricultural development, but as sovereign states can implement their own agricultural policy, whose basic parameters must comply with European Union rules. That is, some countries specialize in those areas of agricultural production that are most profitable for them, while being part of a single agricultural sector of the EU.

A comparative analysis of its indicators will allow assessing the effectiveness of the CAP measures to achieve sustainable development of EU agriculture. The identified trends and problems will be the basis for determining the directions of development and improvement of SAP.

2. Literature review

Recently, in the light of the European integration strategy, the attention of researchers to the problems of integration of agricultural countries into the EU agro-sphere and the consequences of the implementation of the CAP has been increasing. To this end, many scholars are assessing the impact of EU enlargement on the agriculture of countries that have relatively recently joined the EU. For example, some of the first researchers, such as Hertel and others. (1997) [1] (Tangermann and Banse (2000) [2], Hartell and Swinnen (2000) [3], believed that the accession of new EU members would lead to a very significant increase in both crop and livestock production in the newly acceded countries (mainly in South-Eastern Europe), and the net budgetary implications of integration for these countries would be negligible. In general, it was assumed that the accession of countries to the EU will affect food prices and the state of agriculture in the new EU member states, while the state of agriculture in the EU-15 will not change significantly.

Csaba Csaki Attila Jambor and others conducted a thorough analysis in "10 YEARS OF EU MEMBERSHIP IN AGRICULTURE: LESSONS FROM THE NEW MEMBER STATES" [4]. The results of the study showed that Poland and the Baltic States can be considered as leaders in EU accession in agriculture, while Romania, Bulgaria and Slovenia used their potential to the least extent. It was also found that the concentration of countries on the production of agricultural products with a high share of added value proved to be a successful strategy for achieving development in the agricultural sector, while those countries that were focused on the production of agri-food raw materials were found to be lagging behind. These results can be useful for other countries facing integration problems, such as the new member states of the European Union.

The works of Gardner Bruce L., Gordon C. Raussser (2001) [5], Bojnec, Š., & Fertő, I. (2015) [6], Nelson, G. (2001) [7], Popp, J. and Jambor, A. (2015) [8], Gould D., Compagnoni A., Lembo G. (2019) [9], Matyjaszczyk E. (2018) [10], Romanchuk L., Fedonyuk T., Pazych V., Fedonyuk R., Khant G., and Petruk A. (2018) [11] who paid much attention to the comparative analysis of agricultural development in the EU, should also be noted.

Among the CIS researchers dealing with the implementation of the EAP and its role in the balanced development of countries should be noted O. Popova., A. Polyaninna, and S. Dolgova [12], who conducted a comparative analysis of agricultural policies in the North Atlantic region of the OECD (EU, USA, Canada, Switzerland, Norway, and Iceland) according to the methodology for assessing state support for agriculture, developed by the Organization for Economic Cooperation and Development. The scholars focused on assessing the dynamics of support for agricultural producers by comparing the growth rate of production, absolute costs for support of agricultural producers (Producer Support Estimate – PSE) and total costs of agricultural policy (Total Support Estimate - TSE), showing the share of support in the value of gross agricultural output.

Calculations have shown that in European countries outside the EU-28, the leading role in supporting producers is played by mechanisms based on the volume of output, and their importance is
gradually increasing. As for the European Union, the value of payments linked to production volumes is significantly lower due to the significant differentiation of member states in terms of consumer and producer incomes.

Among domestic scientists it is necessary to note T. Zinchuk [13], in whose monograph historical, present and future aspects of agrarian policy of the European Union of SAP of the EU are considered. The main results of reforms in the process of evolution of the European agrarian policy are investigated, the reasons of permanent changes in the basic principles of SAP of the EU are stated. The environmental and social components of the EU SAP are analyzed, taking into account the challenges of globalization and in the context of the Sustainable Development Goals. The necessity of taking into account the scientific and practical achievements of the EU SAP in the national agricultural policy is substantiated.

Domestic experts of the Institute of Economic Research and Political Consulting S. Zolia, O. Nivievskyi (2005) [14], consider dangerous the unpredictability of the direction in which the EU CAP is changing, moving in the direction of reduced support measures that lead to trade distortions and increasingly emphasize rural development, environmental protection, and food security.

Russian researchers such as A. Spiridonov, P. Nikolenko [15] focused on the essence and trends of the SAP, the study of its mission, goals, objectives, tools and its impact on the development of the EU agricultural sector. Great attention to the consequences of the implementation of the SPA for the new EU member states was also paid by N.V. Klimova (2013) [16], N. Jurkenaite (2012) [17], and many others [24-30].

Theoretical aspect. The UN European Commission is actively engaged in the development of the theoretical and methodological basis for the study of the growth of the agricultural sector since 2010, it analyzes in detail the state of the agricultural sector and provides recommendations for further development of the CAP [19; 20]. It has developed a basic method of comparative analysis of the level of agricultural development and efficiency of CAP in some countries proposed by FAO [21]. The system of context indicators developed by it is used to identify threats to agricultural development, the relationship between the various elements of the agrosphere, critical analysis of land development and identify the causes of problems, improve the programming process, and improve the CAP design.

Contextual indicators are divided into several groups.

1. Indicators of economic development (labour productivity in agriculture, labour productivity in the food industry, and labour productivity in forestry).
2. Determining the competitiveness of all types of agricultural firms and their capabilities
3. Development of food chains and development of risk management in agriculture (age structure, labor productivity in agriculture, accumulation of capital in agriculture, use of agricultural lands, and structure of farms).
4. Preservation and restoration of ecosystems.
5. Search for resources to increase the efficiency of agricultural production and reduce emissions, increase the resilience of the agricultural sector to climate change.
6. Ensuring social equality, poverty reduction and economic development of rural areas (employment and unemployment, self-employed, tourist infrastructure, Internet access in rural areas),
7. Development of the services sector, age structure in rural areas.

The tasks of SAP are:
- ensuring food security of countries that are part of the common European market;
- increasing the productivity of agriculture through the optimal use of production factors, including labour, and the use of technical progress;
- ensuring a normal standard of living of the rural population, in particular by increasing the level of individual income;
- stabilization of agricultural markets;
- expanding opportunities for delivery of agricultural products to markets;
- creating safe access to food stocks;
- meeting the needs of consumers for food at affordable prices.
SAP is based on two "pillars".
I - support for production and trade.
II - social and structural support.

The principles of SAP define:
1. The single space of the EU internal market, which removes constraints on the free movement of agricultural products, sets uniform prices for the same type of agricultural products, systematization of hygienic, medical and veterinary standards.
2. Adherence to the principle of competition.
3. Financial cooperation of EU member states, manifested in EU self-sufficiency in food safety; EU participation in balancing the world food market; rural development of the EU; combating climate change and improving the environment.

The EAP supports the efficiency of agricultural production in the European Union and food security through the use of subsidy mechanisms and stabilization of food prices to a minimum.

Instead of a large number of subsidies, a single payment system is used, and the level of support is determined on the basis of compliance with standard requirements in the field of environmental protection, food safety, and animal and plant health. This program is funded by the European Agricultural Guarantee Fund (EAGF), which addresses the challenges of integrated rural development, increasing the competitiveness of the EU agricultural sector, improving the environment and quality of life in rural areas. Under this concept, measures are taken to co-finance EU member states (payments for regions with limited potential, agro-environmental programs, and investment aid). Funds from the European Agricultural Fund for Agricultural Development (ERDF) are used for this purpose.

The following are used as financial instruments of SAP:
1) market regulation instruments (intervention purchases, production quotas, etc.), direct payments that provide support and stabilization of income of agricultural producers;
2) programs for general financial management and control.

Indirect mechanisms based on the support of domestic centres of the agro-food market play a leading role in supporting agricultural producers in the North Atlantic region. In addition, a new step is to expand the use of mechanisms for the use of state regulation, linking it to the growth rate of production facilities, improving the ecological situation, its information support within the identified general services in agriculture.

For regional alignment, the European Commission is developing the agricultural areas of individual countries in four main areas:
- stimulating agriculture and forestry through the development of human capital, support for the production of quality products;
- improvement of the environment and landscape, including the protection and restoration of natural resources, maintenance of areas of certain natural value for agriculture;
- diversification of the economy of rural areas and improving the quality of life, which is carried out through the development of local infrastructure and increase of human capital in rural areas;
- implementation of the Leader program, the concept and methodology of which supports the development of the rural economy, interregional and international relations aimed to improve the quality of life and economic prosperity of rural areas.

In order to neutralize the negative consequences of unpredictable increases in food prices, compensatory measures may also be applied:
- increase in arable land (currently only 34.4% of all land in the EU is used for grain);
- reduction of land area for industrial crops (currently 8.2% of the total area) [22];
- reduction of energy intensity of agriculture;
- extensive use of state-of-the-art methods to increase labour productivity, including through the use of GMOs.

It should be noted that scholars assess the consequences of the implementation of the EU SAP quite contradictory in terms of agricultural development and differences between countries. On the one hand, SAP contributed to the support and development of various organizational and legal forms of
agribusiness. On the other hand, the CAP has intensified competition between EU farmers, which has strengthened the position of Eastern European countries. The implementation of the SAP strategy has led to lower prices for raw materials, agricultural products and products of its processing. Differentiated subsidies were not in favour of farmers in Poland and the Baltic States, on the contrary, they were significantly understated, which contributed to the return of small farms to basic agricultural production.

Since the creation of the EU, the CAP's position has reflected anti-competitive national economic modernization strategies, the need to separate agricultural policy from other sectors, and US demands for trade liberalization. The agricultural and food sectors of the European Union have long been similar in form and content to the planned economy, leading to the creation of an overly complex regulatory mechanism and, in part, to the renationalization of the agricultural sectors. SAP remains a bureaucratic system of economic regulation and management of agriculture and is characterized by a constant risk of large-scale trade disputes. The main problems of SAP: also include:

- intensive export subsidies;
- irrational and unfair distribution of subsidies between farms;
- strengthening public opposition to the priorities of the CAP;
- protectionist prices for agricultural products, which have significantly reduced the competitiveness of agricultural products of market participants;
- significant amounts of appropriations allocated to meet the needs of agricultural producers;
- the complexity of addressing environmental issues due to the rigid approach to the cost and profitability of assessing the effectiveness of SAP;
- Insufficient funding for rural infrastructure development.

The main problems facing the CAP as a result of the intertwining of internal conflicts between EU member states and the external challenges of the globalization of agri-food markets are still unresolved.

3. Methods
We consider it expedient to conduct a comparative analysis of the state of the agricultural sector of European countries in the context of the analysis of basic indicators and forecast analysis of trends in the development of the agricultural sector of individual EU countries. To do this, we took the following indicators: GDP, total agricultural output, total exported products, total exported agricultural products, the index of profitability of agricultural activities compared to the previous year, and the structure of personnel involved in agriculture.

To conduct a comparative analysis in order to avoid data redundancy and simplify the perception of information, 3 countries were taken from the basic groups (highly developed, medium-developed, least developed EU countries), namely France, Germany, the Netherlands, Austria, Belgium, Poland, Czech Republic, Hungary, Romania, and Slovakia.

The first parameter is the index of profitability of agricultural activity. It makes sense to analyze this indicator in two dimensions - relative to the base year to estimate the relative growth for the period, and relative to the previous year to estimate the short-term rate of change in the yield index. The methodology for calculating the base values for the index is based on the ratio of net income to the average number of conditional workers (AWU).

The initial approach was made on the basis of the base year, which adopted 2010, i.e. 2010 = 100. The results are presented in Fig. 1.

As can be seen from the graph, the most developed EU countries (France, Germany, and the Netherlands) for the period of 9 years show stability in the agricultural sector and through a system of subsidies and state support for rural areas provide growth of agricultural profitability within 5% over 9 years. At the same time, the countries with developing economies show significant growth rates of agricultural profitability, with Slovakia showing one of the highest growth rates of the agricultural profitability index and for 9 years the growth was 210% compared to 2010. Similar trends are observed in Hungary, Czech Republic, Romania, and Poland, where the overall increase in the
agricultural profitability index increased by 35-65% in 9 years (all calculations are made with the inflation index taken into account).

Another aspect of this index is the relative increase in agricultural profitability compared to the previous year. Data for these countries are presented in Figure 2.

In general, the graph shows similar cycles of decline and rise in the index of agricultural profitability of individual countries, which may be partly due to natural conditions, but depending on the country, it has an annual time lag (Belgium, France, and Poland), and the higher the level of economic development countries, the higher fluctuations in the index of agricultural profitability are observed. As can be seen, Germany shows changes in the index of agricultural profitability from 0.67 (67% from the previous year) to 1.39 (139% from the previous year).

[23, 24]
The next group of related indicators is the share of agricultural products in GDP and exports. Analysis of the share of agricultural products in GDP for the period 2016-2019 is presented in Table 1.

### Table 1. The share of agricultural products in GDP, 2016-2019

| Countries | 2016  | 2017  | 2018  | 2019  |
|-----------|-------|-------|-------|-------|
| AT        | 1.56% | 1.58% | 1.51% | 1.49% |
| BE        | 1.71% | 1.71% | 1.54% | 1.48% |
| CZ        | 2.60% | 2.36% | 2.20% | 1.99% |
| FR        | 2.73% | 2.72% | 2.75% | 2.75% |
| GE        | 1.40% | 1.45% | 1.29% | 1.26% |
| HU        | 6.62% | 5.88% | 5.69% | 5.15% |
| NE        | 3.23% | 3.27% | 3.02% | 2.95% |
| PL        | 5.20% | 5.21% | 4.69% | 4.51% |
| RO        | 7.25% | 7.25% | 7.27% | 7.27% |
| SK        | 2.58% | 2.42% | 2.18% | 1.99% |

Source [23]

As can be seen from Table 1, all EU countries are characterized by a gradual decline in the share of agricultural products in GDP. At the same time, if we consider the share of agricultural products in exports, which are presented in Table 2, it is seen that the share of agricultural products in most EU countries is gradually increasing, except for those countries that are most actively developing and gradually increasing their own urbanization (such countries include Slovakia, Romania, Hungary, the Czech Republic).

### Table 2. The share of agricultural products in exports, 2011-2019

| Countries | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| AT        | 7.09% | 7.40% | 7.61% | 7.64% | 7.69% | 7.96% | 7.85% | 7.68% | 7.79% |
| BE        | 9.25% | 9.66% | 9.54% | 9.86% | 10.11%| 10.62%| 10.59%| 10.13%| 10.69%|
| CZ        | 4.21% | 4.87% | 5.10% | 5.00% | 5.22% | 5.11% | 4.63% | 4.25% | 4.24% |
| FR        | 13.13%| 13.04%| 13.61%| 13.13%| 13.12%| 12.89%| 13.08%| 12.85%| 12.85%|
| GE        | 5.83% | 5.97% | 6.30% | 6.18% | 6.00% | 6.11% | 5.91% | 5.65% | 5.65% |
| HU        | 8.29% | 9.51% | 9.38% | 8.73% | 8.39% | 8.62% | 8.86% | 8.27% | 8.31% |
| NE        | 18.55%| 17.18%| 18.09%| 18.23%| 19.73%| 19.44%| 18.69%| 18.44%| 19.36%|
| PL        | 11.10%| 12.31%| 13.20%| 13.06%| 13.17%| 13.01%| 13.38%| 13.27%| 13.55%|
| RO        | 8.68% | 8.68% | 10.30%| 10.27%| 10.51%| 10.36%| 10.22%| 9.55% | 9.80% |
| SK        | 5.14% | 5.78% | 5.01% | 4.23% | 4.14% | 4.06% | 3.86% | 3.61% | 3.22% |

Source [23]

It is also seen from Table 2. that the higher the level of economic development of the country, the greater the share of agricultural products in its exports, although the share of agricultural products in GDP is gradually declining. This is due to the fact that with the development of the economy the degree of processing and range of agricultural products increases, so does, in fact, its value, so revenues from its exports are gradually increasing.

Another important indicator for studying the differences in the level of agricultural development in the EU is the structure of the labor force involved in agriculture. Based on the data presented in Table 3, most EU countries actively use seasonal labor in agriculture, and the closer the country is to the EU's common borders, the higher is the level of seasonal labor, as it is significantly cheaper than national.
Table 3. The share of seasonal workers in the structure of the labor force employed in agriculture

|     | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| AT  | 88,0%  | 87,0%  | 87,7%  | 86,8%  | 85,1%  | 84,5%  | 84,2%  | 83,5%  | 82,7%  |
| BE  | 682,8% | 82,1%  | 81,6%  | 81,1%  | 81,0%  | 78,5%  | 81,8%  | 81,1%  | 80,2%  |
| CZ  | 25,2%  | 25,4%  | 25,9%  | 26,1%  | 2,1%   | 26,6%  | 26,6%  | 26,6%  | 26,8%  |
| FR  | 68,3%  | 65,8%  | 65,1%  | 64,9%  | 64,8%  | 64,4%  | 64,2%  | 63,8%  | 63,3%  |
| GE  | 57,7%  | 57,1%  | 56,8%  | 56,6%  | 56,1%  | 56,0%  | 55,8%  | 55,7%  | 55,6%  |
| HU  | 77,0%  | 74,2%  | 72,2%  | 73,9%  | 71,4%  | 70,8%  | 72,7%  | 72,3%  | 71,5%  |
| NE  | 53,2%  | 53,8%  | 52,4%  | 54,1%  | 54,9%  | 54,9%  | 54,6%  | 54,4%  | 55,2%  |
| PL  | 89,7%  | 89,8%  | 89,4%  | 89,3%  | 88,5%  | 88,2%  | 88,1%  | 87,9%  | 87,5%  |
| RO  | 89,7%  | 87,1%  | 90,6%  | 87,3%  | 86,4%  | 90,2%  | 92,2%  | 90,4%  | 91,0%  |
| SK  | 28,8%  | 29,2%  | 28,4%  | 28,9%  | 20,2%  | 20,3%  | 34,8%  | 35,1%  | 34,1%  |

Source [24]

At the same time, this situation creates significant risks for agricultural development, because if we analyze the difference between the cost of national and engaged labor in agriculture, it ranges from 30% to 55%, ie foreign seasonal labor is significantly cheaper, which allows to provide stable level of agricultural profitability.

4. Results and discussion

Based on these indicators, we can build a forecast model using the Holt-Winters method, which allows forecasting the development of economic indicators based on three-level AAA smoothing, taking into account explicit and implicit seasonality and extrapolation factors of external influence [26]. Also, this method allows you to determine the upper and lower limits of the permissible deviation of the actual and calculated values.

The basic forecast taking into account the upper and lower limits of admissibility for the index of agricultural profitability for 2020 in two versions of its calculation are presented in Table 4.

Table 4. Base forecast of the index of agricultural profitability for 2020

| Countries | Profitability index compared to the base year | Profitability index compared to the previous year |
|-----------|---------------------------------------------|-----------------------------------------------|
| AT        | 92%                                         | 1,03076                                      |
| BE        | 70%                                         | 0,89839                                      |
| CZ        | 154%                                        | 0,84745                                      |
| FR        | 113%                                        | 1,08935                                      |
| GE        | 84%                                         | 0,93621                                      |
| HU        | 178%                                        | 0,89702                                      |
| NE        | 118%                                        | 1,02114                                      |
| PL        | 133%                                        | 1,00352                                      |
| RO        | 141%                                        | 1,00768                                      |
| SK        | 217%                                        | 1,06163                                      |

Source: author's calculations

The table shows that 2020F1 is the lower limit of the fluctuation of the yield index, 2020F2 is the upper limit, 2020F3 is the closest to reality value, calculated by combining the Holt-Winters method and the weighted average estimate method. According to Table 4, it is concluded that in 2020 the level
of agricultural profitability in actively developing countries is projected to increase, with a slight decrease in the most developed countries.

Similar calculations will be made for a group of indicators on the share of agricultural products in GDP and exports, as presented in Table 5.

**Table 5.** The share of agricultural products in the structure of GDP and exports of goods, the forecast value

| Countries | Indicators in GDP | 2020F1 | 2020F2 | 2020F3 | Indicators in the export of goods | 2020F1 | 2020F2 | 2020F3 |
|-----------|-------------------|--------|--------|--------|----------------------------------|--------|--------|--------|
| AT        | 1,46%             | 1,49%  | 1,48%  | 0,078648 | 0,080125 | 0,07939 |
| BE        | 1,40%             | 1,49%  | 1,44%  | 0,108354 | 0,107366 | 0,107861 |
| CZ        | 1,79%             | 1,99%  | 1,89%  | 0,041936 | 0,047612 | 0,044864 |
| FR        | 2,76%             | 2,75%  | 2,76%  | 0,12808 | 0,128947 | 0,128514 |
| GE        | 1,21%             | 1,27%  | 1,24%  | 0,05606 | 0,058717 | 0,057404 |
| HU        | 4,68%             | 5,13%  | 4,91%  | 0,082266 | 0,084363 | 0,083321 |
| NE        | 2,84%             | 2,96%  | 2,90%  | 0,194273 | 0,19201 | 0,193145 |
| PL        | 4,26%             | 4,52%  | 4,39%  | 0,137618 | 0,138896 | 0,138259 |
| RO        | 7,28%             | 7,27%  | 7,28%  | 0,09916 | 0,105818 | 0,102543 |
| SK        | 1,79%             | 1,99%  | 1,90%  | 0,029367 | 0,03234 | 0,03089 |

Source: author's calculations

Comparing the data in Table 5 to the data for 2011-2019 one can clearly see that the general trend towards maintaining the share of agricultural products in the structure of GDP and exports of goods can be traced in each country (excluding external factors).

Analyzing the above data, we can state that the above calculations do not take into account the introduction of quarantine, border closures and slowing down foreign trade. Given the volume of seasonal foreign staff involved, quarantine measures will hit countries closer to the EU’s borders the hardest. We can assess this impact on the basis of fluctuations in agricultural profitability indices during the 2013-2014 financial crisis, which also caused a decline in economic development. If we take the trends of the crisis period and the pace of economic recovery as a basis for calculation, and consider the forecast obtained on the basis of the Holt-Winters method by extrapolating the impact of the financial crisis on the current period, we obtain a forecast of agricultural profitability index presented in Table 6.

**Table 6.** Forecast of change in the index of agricultural profitability, 2020

| Countries | Compared to the base year (2010) | Compared to the previous year |
|-----------|----------------------------------|------------------------------|
| AT        | 94%                              | 0,95                         |
| BE        | 63%                              | 0,81                         |
| CZ        | 144%                             | 0,92                         |
| FR        | 109%                             | 0,96                         |
| GE        | 83%                              | 0,97                         |
| HU        | 162%                             | 0,87                         |
| NE        | 114%                             | 0,97                         |
| PL        | 125%                             | 0,93                         |
| RO        | 144%                             | 0,97                         |
| SK        | 202%                             | 0,98                         |

Source: author's calculations
Data of Table 6 make it possible to predict a decline in agricultural profitability in 2020 from 2 to 19%. At the same time, the upper and lower limits of the fluctuations of the real value are not fixed due to the presence of extrapolation of external influences, which reduces the reliability of the forecast.

Regarding the revaluation of the share of agricultural products in GDP and exports, these indicators are expected to decrease in EU border countries due to the impossibility of attracting foreign seasonal staff and the need to use relatively expensive national labor, but in other EU countries both indicators are expected to increase by 1-3% as agriculture will be the least affected sector by quarantine measures, due to the fact that even during a period of severe quarantine, all agricultural enterprises continue their activities.

5. Conclusion
A comparative analysis of individual EU countries in terms of the contribution of agricultural products to GDP, the share of agricultural products in exports, the share of seasonal workers in the structure of labor force in agriculture and agricultural profitability indices, as well as an analysis of their forecast values, showed uneven agricultural development. In the group of more developed countries, the share of agricultural products in the structure of exports is higher, but there is a gradual decrease in the share of agricultural products in GDP. The forecast analysis shows that in the group of less developed countries the rate of labor productivity will increase, although no significant changes in the share of agricultural products in GDP and exports are expected.

To some extent, the differentiation of countries by level of agricultural development can be explained both by differences in climatic conditions and the fact that with the development of the economy increases the degree of processing and expands the range of agricultural products, which on the one hand, raises prices and on the other, allows producers of developed countries to compete successfully in international food markets. The smaller share of agriculture in less developed countries (mainly in the south-eastern region - Slovakia, Poland, the Czech Republic, Lithuania, Hungary, Bulgaria, and Romania) suggests that less developed countries to some extent serve as the EU's agricultural base.

On the one hand, it allows them to receive significant budget subsidies, therefore they have the potential to increase productivity and increase the level of agricultural development. However, the coronavirus pandemic may have a negative impact on agricultural sales and profitability in 2020-2021. Also, the forecast analysis shows a low probability of significant changes in the share of agriculture in GDP and exports in all groups of countries, which suggests that differentiation between EU countries in terms of agricultural development will continue. Thus, in the EU there are two opposite trends: convergence, which is stimulated by the CAP to ensure the formation of a single EU agricultural complex, and divergence due to the specialization of countries in the production of those types of agricultural products for which countries have the most favorable conditions. In addition, it should be noted that significant differences and fluctuations persist in labor productivity in agriculture, due to differences in natural conditions in different years, fluctuations in the euro exchange rate, which affects the competitiveness of agricultural products in world markets, and price trends in world food markets.

In general, the implementation of the EAP on the convergence of agricultural areas of different countries into a single EU agricultural complex can be considered quite successful, which largely contributed to the EU's leading role in world food production and trade: 17% of world food exports. The EU is the world's second largest exporter of dairy and pork and the third largest exporter of poultry and grain.

The urgent tasks of the EAP to ensure food security and development of agricultural European countries, in particular to equalize regional differences include: stimulating resource efficiency and the transition to sustainable development of a climate-resilient economy; promoting the dissemination of knowledge and innovation in agriculture; improving the quality of agricultural management; improving the organization of food production chains and risk management in agriculture; restoration,
preservation and strengthening of agriculture dependent ecosystems; poverty reduction and promotion of rural economic development.

Thus, the novelty and practical value of the work is in assessing the effectiveness of CAP measures to achieve sustainable development of EU agriculture through a comparative analysis of its indicators. Authors defined the directions of development and improvement of SAP on the basis of the revealed tendencies and problems.

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