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ROMANIAN AGRICULTURAL MARKET: THE RELATIONSHIP BETWEEN ECONOMIC GROWTH, ORGANIC PRODUCTION AND THE LABOUR MARKET

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Abstract

The importance of the agricultural sector, of the organic production and of the agricultural labour market leads the authors to study their dynamics and characteristics with regard to Romania. Food safety is linked to the agricultural activity's robustness and its evolution, given that the primary sector is the one that defines economic growth. The paper studies the link between the economic growth and the organic agricultural production in Romania, including labour market's characteristics. The time period is 2010-2019, and the methodology is that of a cross-sectional study. The multiple regression model is used to analyse the relationship between Romania's economic growth and seven factors which characterize the agricultural sector. The results show that, between Romania's economic growth and the variables under study, there is a link that is maintained over time, and which is positive in some cases and negative in other cases. Agricultural technology decreases the role and contribution of salaried and non-salaried labour in agriculture to Romanian economic growth. Processing of agricultural products has the same effect on growth. Instead, the authors outline the important role of organic agriculture, of agricultural services and of livestock production in the Romanian economy.

Key words: *agricultural labour market, agricultural sector*, *economic growth*, *organic production*.

INTRODUCTION

The paper's main goal is to study the link between economic growth and agricultural production, mainly the organic one, in Romania, also by analysing the contribution of salaried and non-salaried labour in the primary sector.

In UE, 50% of the territory is represented by rural areas with a population of 113 million of inhabitants and providing 20% of the work places, and 15% of the gross value added (GVA) in European economy (Paul, 2020). Agriculture remains a prevailing activity in European rural areas, in spite of the economic, social, political and environmental changes happening in the agricultural sector (Todorova & Ikova, 2014). The agricultural sector has significant differences between the European regions (Guth & Smędzik-Ambroży, 2019), and agricultural sustainability is moderate. The Central European states have the largest contribution to the economy, while the Mediterranean states have the largest contribution to the environment, and the Eastern European states mostly contribute to employment generation (Dos Santos & Ahmad, 2020). Agriculture has a complex multiplier effect in all sectors of the economy, being a supplier and consumer for a wide range of products (Andrei et al., 2017). European agriculture has little contribution to GDP, about 1.6%; it provides 4.5% of jobs and 1.2% of exports and 1.4% of imports (Dos Santos & Nawaz, 2020). However, the pressures on the environment are important. In UE, according to Renner et al. (2020), half of the greenhouse gas emissions, other than CO_2, are generated by agricultural activities. UE imports a significant number of agricultural products, with imports exceeding exports in terms of aggregate quantity. The labour force involved in agriculture is scarce. Three quarters of the European population live in urban areas, and the role of European farmers is to feed the urban population. Renner et al. (2020) argue that the reduction of the agricultural workforce is a recent trend that is not easy to reverse, and that technical progress will not be enough to deal with future challenges. Another trend,

according to Fitton et al. (2019), is the reduction of agricultural land simultaneously with a change in the attitude towards food, in the sense of reducing food waste. This is the biggest buffer against food insecurity. Agricultural productivity has increased progressively, but with an impact on the ecosystem (Fitton et al., 2019), causing biodiversity loss (Rega et al., 2020). Climate change influenced global agriculture. Prăvălie et al. (2020) show that, between 1980 and 2008, maize production decreased globally by an average 3.1% because of temperature change, and by 0.7% because of changes in rainfall. Agriculture follows patterns of seasonality correlated with product's life cycle, climate and physical characteristics of the land (Rembold et al., 2019). On the long term, reducing cereal crop production will affect food security and socio-economic stability. All these trends were in favour of the development of organic farming. The demand for organic products has increased substantially in Europe; organic production has become a lifestyle (Bejinaru et al., 2020) and it is the solution to solve environmental problems such as global warming, biodiversity reduction and desertification (Stoi et al., 2020).

Romania still has difficulties in reaching the socio-economic potential of the agricultural sector and rural areas, inhabited by 46.3% of the population in 2018 (Răzvanță Puie, 2020). The Romanian agricultural sector is of utmost importance for the economy and society. Romania is considered the most rural European country. Nevertheless, it lacks diversification, it relies almost exclusively on relatively small farms, it lacks technologically advanced equipment, storage for primary production, packaging and transport possibilities (Paul, 2020).

The agricultural structures in Romania are characterized by a dual model: most farms are relatively small, and the used agricultural area is half of the total land (Wolz et al., 2020). The Romanian agricultural system has undergone important transformations in terms of land use, productivity and operation, and it is still a sector of utmost importance for the Romanian economy, which can be described as agrarian economy, with an impact on rural communities (Andrei et al., 2017). Cereal crops, mostly wheat and maize, are important in Romania's agriculture, according to Buliga-Ștefănescu (2019). The author argues that, in spite of the fact that Romania has a significant agricultural potential, it cannot be used adequately because of the lack of mechanization, the fragmentation, the lack of capital and of irrigation systems, and farmers' lack of formal training and their old age.

As a EU member state, Romania strengthens its position in agriculture, especially with the increase of the percentage of land intended for organic production, which can raise the net revenues and lower the negative impact on environment and the risks associated to weak crops (Crecană & Crecană, 2019).

The added value of organic agriculture is important especially for the local economy; however, there is low demand for organic products (Ak & Teker, 2020). Still, the literature also draws attention to the opposite side, namely that the agricultural products industry has exploded, the demand is higher than ever (Nain et al., 2020) and growing (Nikolova, 2019), and the expansion on the European market was 200% during 2000–2017 (Blaće et al., 2020). Crecană & Crecană (2019) show that the role of organic agriculture in the future depends on its productivity and capacity to become economically competitive with conventional agriculture. This depends on the organic agriculture productivity, the demand and if the sale prices reflect the cost of outsourcing linked to production reorientation, including those linked to environment and health.

The decision to consume organic agricultural products follows the awareness regarding the environmental issues, and women are most likely to purchase them (Do Prado, 2020). A study of the factors influencing the dynamics of organic farming development in Croatia shows that this type of farming is adopted based on lifestyle, but also on the environment, ideology and philosophy of producers and consumers, regardless of age or educational level (Blaće et al., 2020).

Romania has great potential for organic farming even if the number of certificates is low for the time being. This market segment needs to be exploited due to the increasing European and global demand for organic

products with high added value (Crecană & Crecană, 2019). The future importance of this niche market means that rural areas play a key role in the development of the bio-economy, which covers all innovative production activities that use the conversion of biological resources (Butu et al., 2020), as agriculture is oriented towards more environmentally responsible methods (Popescu & Safta, 2020).

Given the agriculture's importance for the European and Romanian economy, for food, social, political and institutional safety, as well as the increasing role and weight of organic production, the authors propose an analysis of the Romanian agricultural market in relation to economic growth, on one hand, and to organic production and labour market, on the other hand. Four hypotheses were formulated and the multiple linear regression for time series was used.

H1: organic agriculture has a positive impact on Romania's economic growth;

H2: agricultural services and livestock production have a positive impact on Romania's economic growth;

H3: salaried and non-salaried labour force has a positive impact on Romania's economic growth;

H4: cereal production and the processing of agricultural products have a positive impact on Romania's economic growth.

The paper's sections show the analysed indicators, used methods, results and conclusions, outlining the research's usefulness and limitations.

MATERIALS AND METHODS

Data

Data is retrieved from Eurostat and TEMPO, and the time period is 2010-2019. Data for 2019 are estimates. Labour market is described using indicators about labour force in agriculture, non-salaried labour force (NSLF) and salaried labour force (SLF). The measuring unit of these indicators is 1000 AWU (Annual Work Units). According to Eurostat (https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Annual_work_unit_%28AWU%29), AWU is the equivalent of full-time employment or the total hours worked divided by the mean hours worked in the full-time workplaces in the country. An annual work unit corresponds to the work carried out by a person employed full-time in an agricultural holding. Employment contracts regulate the minimum number of full-time working hours. If the employment contract does not specify the annual number of hours, then the minimum amount shall be deemed to be 1,800 hours, or the equivalent of 225 working days on an 8-hour basis. Given that the volume of agricultural work is calculated on the basis of full-time equivalents, no person can equalize more than 1 AWU. This restriction stays valid even if a person works in agriculture more hours than the legal number of hours considered as full-time.

Economic progress or growth is assessed with the help of gross domestic product (GDP) at current prices, expressed per capita. It characterizes the economic situation of an area and it represents the total value of goods and services produced over a given period of time, less the intermediate consumption consisting of all goods and services used to produce the former ones. We opted to express GDP in current prices because this eliminates price differences between countries and per capita values allow significantly different economies to be compared in terms of their size.

GDP per capita is expressed in national currency at current prices. In order to describe Romania's agricultural production, reference is made to the cereal production, including seeds (cer), livestock production (anim), agricultural services (serv) and processing of agricultural products (pap). The value of these components of agricultural production is rendered by the producer's price, which is divided by the number of inhabitants, which gives the value per capita.

The total Utilized Agricultural Area (UAA) measures, according to Eurostat (the database from which the indicator was retrieved), the percentage from the total agricultural area utilized for organic agriculture. Organic agriculture refers to organic farms in Romania and the farms in transition to organic agriculture. Farms are considered organic if they are aligned to Council Regulation (EC) No. 834/2007, which provides the framework for organic production, labelling and

processing, and whether they meet European import criteria.

Methodology

The method used to analyse the impact of agricultural product and labour market on Romanian economy is time series multiple linear regression. The time component was introduced into the multiple regression equation. The initial equation was of the following form:

$$Y_{it} = a + b*X_{it} + et \quad (1)$$

Equation (1), customized for our analysis, was converted to Equation (2), where GDP is the dependant variable or the output, and uaa, cer, anim, serv, pap, slf and nslf are the seven independent or explanatory variables of the model.

$$GDP = \beta_0 + \beta_1 uaa + \beta_2 cer + \beta_3 anim + \beta_4 serv + \beta_5 pap + \beta_6 slf + \beta_7 nslf \quad (2)$$

Existing data were logarithmized in order to obtain more objective results.

RESULTS AND DISCUSSIONS

After data processing, the panel regression equation is as follows:

$$GDP = 32.97 + 0.45*uaa - 0.31*cer + 0.39*anim + 0.35*serv - 0.94*pap - 1.39*slf - 1.66*nslf \quad (3)$$

In the analysed model, the value of the coefficient of determination shows that the model matches the data very well. The economic growth variation is explained at 99.67% by the variation in the independent variables. There is a positive link between the economic growth and the agricultural area used for organic production (uaa), livestock production (anim) and agricultural services (serv), and a negative link between the economic growth and cereal and seed production (cer), processing of agricultural products (paps), and salaried labour force (slf) and non-salaried labour force (nslf). The negative link is explained to a great extent by the introduction of agricultural technology and the shrinkage of processing industry (Buliga-Ștefănescu, 2019; Iancu et al., 2020), in spite of the fact that the small size of the majority of farms hinder the amortisation of technology investments (Salih, 2020). They remain the privilege of the large Romanian farms. However, for the year 2030, the OECD estimates that half of the agricultural production will be obtained using biotechnology (OECD, 2009; Butu et al., 2020), elements that combine technology with organic production and which help us anticipate the trend of agriculture mechanization and massive replacement of the labour force.

The values of the non-standardized coefficients show that an increase by one unit of the area intended for organic agriculture determines a GDP increase by 0.45 units, while the other factors remain unchanged, which supports the first hypothesis (H1). The increase of the livestock production by one unit results in the increase of GDP by 0.39 units, and the increase of the agricultural services by one unit leads to the increase of GDP by 0.35 units, which validates the second hypothesis (H2). In regard to the cereal production, the processing of agricultural products, the salaried and non-salaried labour force, their increase by one unit causes the decrease of GDP by 0.31 units, by 1.39 units, and by 1.66 units, respectively, which invalidates the third and the fourth hypotheses (H3, H4). The coefficients of the estimated model belong to confidence intervals, and p-value and t-value are according to Table 1.

Also, we determined the marginal value that production and labour market specific to the Romanian agricultural sector have upon economic growth: 10.493.

The values of variables describing the model show a good match. Graph 1 shows the relationships between variables. They are not very correlated with each other, as the model premises request.

The correlation coefficients (Table 2) show that there is a low-intensity negative relationship between the growth and the number of workers (salaried and non-salaried) and the livestock production, except for non-salaried workers, where the link is medium to high.

Table 1. Descriptive values of the model

Non-standardized coefficients		95% Confidence intervals	
Name	**Value**		
uaa	0.4476649	-0.3007815	1.196111
cer	-0.3134144	-0.6991974	0.0723686
anim	0.3896691	-1.041067	1.820405
serv	0.3463993	-0.0590851	0.7518838
pap	-0.9380073	-1.779361	-0.0966538
slf	-1.392845	-2.471694	-0.3139959
nslf	-1.657403	-3.420513	0.105708
cons	32.97539	14.78772	51.16306
R-square	0.9967	**Prob>F**	0.0114>0.1
Adj. R-square	0.9853		
t-value		**Theoretical t-value**	
uaa	2.57	4.587	
cer	-3.5		
anim	1.17		
serv	3.68		
pap	-4.80		
slf	-5.55		
nslf	-4.04		
cons	7.8		

Source: authors' calculations in STATA

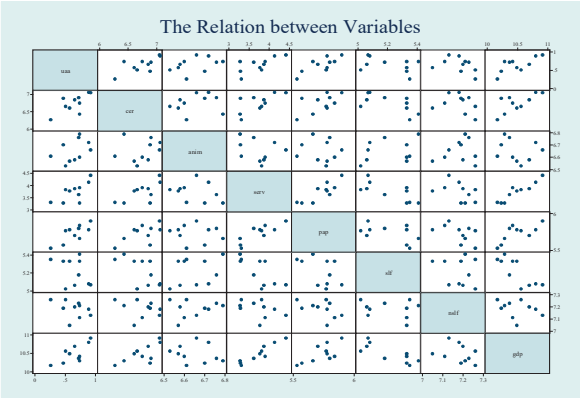
Table 2. Correlation coefficients

	uaa	**cer**	**anim**	**serv**	**pap**	**slf**	**nslf**
uaa	1.0000						
cer	0.7010	1.0000					
anim	0.4078	0.1834	1.0000				
serv	0.7041	0.6935	-0.2611	1.0000			
pap	0.7715	0.5932	-0.0991	0.8418	1.0000		
slf	-0.3838	-0.6307	0.2751	-0.7172	-0.4956	1.0000	
nslf	-0.3872	-0.2632	0.1761	-0.4307	-0.5106	-0.2043	1.0000
gdp	0.7169	0.7039	-0.1775	0.9435	0.7193	-0.7997	-0.3125

Source: authors' calculations

There are negative relationships between agricultural services and livestock production, between the processing of agricultural products and the processing of animal products, between salaried labour and the total area utilized for organic agriculture, but also between the last one and the cereal production, the agricultural services and the processing of agricultural services. There is also a negative relationship between non-salaried labour and the rest of explanatory variables, except for livestock production, where there is a low-intensity positive relationship. As for the livestock production and the area utilized for organic agriculture production, the relationship between variables is positive, with a low-to-medium intensity. The relationship between agricultural services and the area utilized for organic agriculture, between agricultural services and cereal production, but also between the processing of agricultural products and the organic agriculture area and between the cereal production and the agricultural services is also positive, but its intensity is medium to high. The relationship between growth and explanatory variables is positive, of a medium-to-high intensity, except for livestock production, where it is negative and of very low intensity (-17.75%), non-salaried labour, where the intensity is medium to high (-31.25%), and salaried labour, where it is high (-79.97%).

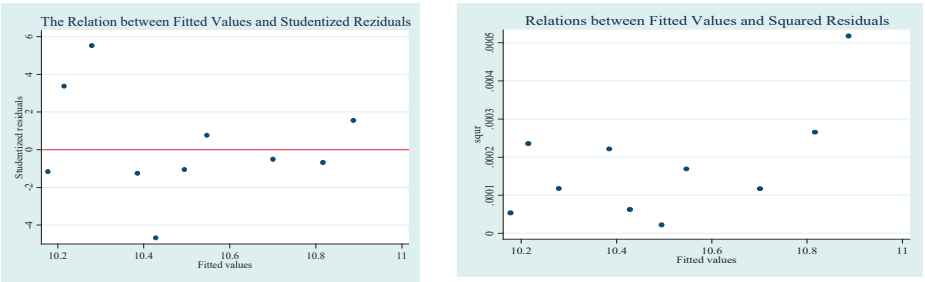
The relationship is positive and of medium-to-high intensity between growth and the area utilized for organic production (71.69%), between growth and cereal production (70.39%), and between growth and the processing of agricultural products (71.93%). The relationship is positive and of high intensity between economic growth and agricultural services (94.35%) (Table 1 in Annex). These results validate the hypotheses H1 and H2 and invalidates the hypotheses H3 and H4.



Graph 1. The relationship between variables

The VIF factor was used in order to identify multicollinearity issues. According to the resulted values, such issues are not identified in regard to the agricultural services (VIF=12.68), the area utilized for organic agriculture (12.30), and the salaried labour (14.00), but they are possible in all the other situations. With a mean value VIF = 9.42, the existence of some aspects linked to multicollinearity cannot be excluded for the rest of the explanatory variables. Graph 2 is a verification of the assumptions on residual values in order to see whether the homoscedasticity condition is fulfilled, and the extreme cases were detected.

Residual values are within the optimum interval, except for the ones which are specific to years 2011, 2012, and 2014.



Graph 2. The relationships between fitted values, studentized residuals, and squared residuals

Skewness (0.378) and Kurtosis (1.59) values show a normal distribution of the residuals. In regard to the Kurtosis value, there are two considerations. The repartition can be considered as slightly leptokurtic or it can be considered normal starting from the assumption that the kurtosis excess appears when the indicator's value exceeds 3, which is not the case. The Skewness/Kurtosis test validates the normality hypothesis, because the Prob>Chi value of 0.2263 exceeds α (0.05), and the Shapiro-Wilk test strengthens this conclusion with the Prob>z value of 0.17639. The Breusch-Pagan test values (chi2(1) = 1.02 and Prob>chi2 = 0.3127) and the bivariate and multivariate normality test values (Prob>chi2 = 0.1017) validate the normality hypotheses.

Therefore, this model matches the analysed data, validates the H1 and H2 hypotheses, and invalidates the H3 and H4 hypotheses.

In spite of the high potential, the Romanian agriculture's competitivity level is low compared to other European states, some of them with a lower potential (Andrei et al., 2020), given that 46.3% of the population is rural, the agriculture provides 29% of the total work places, but its GDP contribution is merely 5% (Faludi & Neamțu, 2020). The share of the agricultural economy in the rural economy is 60%, 4 times higher than in the EU, where it

merely reaches 14% (Boghean & State, 2020). The agricultural structure is unfavourable, less similar to that of European countries and closer to that of Latin America (Burja & Burja, 2016). Romania is the European country with the largest number of nonuniform farms, where the small ones prevail, but there are also large ones, outlining a weak structure. In addition, there are various shortcomings: low salaries compared to the salaries in Europe's developed countries, lack of training of farmers, lack of communication skills, which affects the managerial environment in the agricultural sector (Salih, 2020). Nevertheless, there have been signs of positive evolution especially after the year 2000. Between 2000 and 2018, labour productivity in agriculture almost doubled (Melnic & Puiu, 2019). Agricultural yields depend on climate variations, especially rainfall, which were insufficient in recent years, and the irrigation systems are not enough. Sugar beet crop was low in 2004, but it was one of the most productive years in regard to the cereal production which increased constantly, except for 2009, 2012 and 2015, thus being in opposition with the results of this research which invalidated hypothesis H4. This is due to the fact that the hypothesis combines the role of cereal production and of the processing of agricultural products in economic growth; the processing of agricultural products is severely short and has a negative impact on economic growth. An upward trend was reported in vegetable production, as well, as a result of subsidies for mechanization. Buliga-Ștefănescu (2019) shows that, after joining the EU, all types of crops increased their production due to the subsidies. Subsidies helped farmers to purchase the necessary technologies and products, fertilizers and herbicides, which were affordable especially for large producers. These are performances for Romanian agriculture, nevertheless, the yields are still lower than the European average.

In 2018, Romania had 30% of Europe's maize production, but, according to Prăvălie et al. (2020), climate change will affect Romania's position in the European hierarchy, because there is currently an acute shortage of irrigation infrastructure. Romania's cereal production is growing, but there are major concerns worldwide. Cereal production is the most important pillar of global food safety and it should increase by 70% by 2050, in order to cope with the population growth (Prăvălie et al., 2020), which stimulates Romania to maintain its position regarding this crop on the European market. While the cereal and vegetable production increased, the animal production decreased by 1.76%, and the animal products decreased by 1.11% between 2015 and 2016 (Crecană & Crecană, 2019).

We have shown that Romania has potential for the development of organic agriculture because, in addition to the appropriate area, small amounts of fertilizers and chemicals are used, and an adequate green marketing strategy stimulates the production and consumption of organic products and helps develop the market and the agricultural sector (Aceleanu, 2016). Romania does not rely exclusively on conventional agriculture; it is oriented towards organic agriculture, which has become an important sector both in terms of demand and supply (Girip et al., 2020). Even though it started as a niche activity, with luxury products, intended for high-income social categories, organic agriculture tends to become the norm in the EU (Crecană & Crecană, 2019). In 2018, Romanian organic agriculture utilized an area of approximately 327 thousand hectares and involved 9008 farmers, where cereal and industrial crops prevailed (Șonea et al., 2020). Organically cultivated areas increased significantly between 2000 and 2017. Organic agriculture, through its mechanisms, favours the agricultural labour market.

In Romania, agricultural labour force increased, and after 1990 the individual, small farms, became dominant (Swinnen et al., 2005). Therefore, labour market is characterized by imbalances (Pașnicu & Ciucă, 2020), especially through low productivity (Burja & Burja, 2016; Buliga-Ștefănescu, 2019; Boghean & State, 2020). In spite of the many efforts, the outcome leaves much to be desired (Popescu, 2015). Agricultural labour is different from other sector's labour due to the following: it is non-uniform and unequal, the share of employed population is high, reaching 27% of the total employed population (Salih, 2020), and the education level is low. After 1990, agriculture incorporated the labour force made redundant from other sectors, acting like a buffer in the

labour market. According to certain sources, 12.7% of the agricultural workers are employed with a legal contract (Iancu et al., 2020), while other sources report a share of 16% (Salih, 2020). These values justify the low costs which stimulated the agricultural production based on the extensive use of labour, which resulted in the productivity decrease (Iancu et al., 2020). The Romanian rural environment is little diversified in terms of economy, so that local people are forced to practice subsistence agriculture (Faludi & Neamțu, 2020). In 2019 only 11.3% of the rural population had access to sewerage, 40% of households had constant access to drinking water, over 50% of the water in rural areas is not suitable for drinking, only 15% of the road infrastructure is modernized (Paul, 2020). This explains skills shortages, high unemployment rates and the dependence of the rural population on agricultural activities (Pleșca et al., 2020). There is a significant relationship between farmers' education, farm size, structure, and efficiency (Burja & Burja, 2016). Specialization helps increase efficiency, but small farms use low-skilled labour force. The low level of training of the labour force is an issue for Romanian agriculture. A share of 96.4% of the agriculture workers underwent on-the-spot training, compared to the European average of 70.95% (Salih, 2020). Salih (2020) also notices young people's lack of interest to gain knowledge and skills through training programs or other types of formal education. However, in spite of the very low performance, there has been progress due to the macro-economic stabilization programs, especially the ones involving privatisation, restructuring and liquidation of non-profitable activities, which allowed the recovery after 2000 (Rodriguez-Planas & Benus, 2010). Work productivity increased by 1.84 times between 2009 and 2018, and Romania scored one of the best results in Europe following the implementation of active measures targeted mostly at improving women participation to labour market, reducing employment in subsistence agriculture, involving more young people in labour market, supporting labour mobility locally, regionally and transnationally (Melnic & Puiu, 2019).

Our research shows the increased impact of agricultural sector on Romania's economic growth. In spite of the existing shortcomings, taking appropriate measures, not only regarding the structural macroeconomic policy, but also the individual farm, on reorganization into various forms of associations, will help reduce costs through investment and technology. The irrigation system also needs to be developed, along with agriculture fertilization and mechanization, to reduce the dependence on climatic conditions. Industry development will help increase the export of processed products, leading to an increased contribution of agriculture to GDP, as the primary products export has low contribution due to low prices on the global market.

CONCLUSIONS

The conclusion of our work is that Romania's economic growth between 2010 and 2019 received positive influence from the organic agriculture, analysed under the form of the area utilized by the organic farms. The same effect came from the livestock production and agricultural services. Between 2010 and 2019, the economic growth was negatively influenced by the processing of agricultural services, but also by the work of salaried and non-salaried people in the agricultural sector. Together, these two variables have a negative effect on economic growth; we have the certainty that cereal production's positive effect is neutralized by the negative effect of the processing of agricultural products, where Romania has a high deficit. Therefore, the orientation towards organic agriculture has positive effects on Romania's economic performance. The results encourage the development of this niche market, the improvement of agricultural services and of the livestock production. In regard to the agricultural labour market and the processing of agricultural products, attention is drawn to the need of restructuring, in order to increase efficiency, through a set of short, medium and long-term economic policy measures aimed at the labour market, education and industry.

The research is limited by the lack of indicators for longer periods of time, and for other countries, which would have allowed a comparative analysis. Moreover, a more complex picture would be provided by

including additional indicators, such as those that complement the factors analysed in this study as explanatory variables, but also related factors which explain certain results.

The paper sheds light on the significant role that the agricultural sector has had and will continue to have for Romania's economy, and on the fact that, although for almost a decade the organic agriculture's importance has increased, livestock production and agricultural services are still as important due to their effect on economic growth. Far from denying the importance of processing services and cereal production, their negative impact on growth is noticed. Therefore, at the decision-making level, these two activities should receive due attention, because processed agricultural products add greater value compared to the non-processed ones, and the scarcity of its processing industry places Romania at a disadvantage on the domestic and foreign market. The lack of processing industry stimulates the import and re-export, i.e., the export of primary agricultural products at low prices and their repurchase, in processed form, at much higher prices. We also draw attention to some changes in the agricultural labour market, following the conclusion that in Romania, salaried labour, but especially non-salaried labour, have a negative impact on growth; this requires a change in economic policy's strategy to allow the absorption of the labour force that has been replaced by technology in the agricultural sector. For the reasons above, the rethinking of the agriculture's employment policy is needed for a positive impact on growth.

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