

COMMON AGRICULTURAL POLICY VS. CONVERGENCE OF THE EU SOCIO-ECONOMIC DEVELOPMENT

Barbara WIELICZKO¹

¹ PhD., Assistant Professor, Institute of Agricultural and Food Economics – National Research Institute, Warsaw, Poland, email: Barbara.Wieliczko@ierigz.waw.pl

Abstract

The EU countries differ their socio-economic development. If the assessment is made at the NUTS-2 level, the differences are even greater. The least developed turn out to be the regions with the highest proportion of rural areas. The problem of the efficiency and effectiveness of the EU policies is often studied. Yet, most of the studies focus on a single policy thus they do not verify the interlinks among them and the existence of the synergy effect. This paper presents the problem of the convergence of the EU socio-economic development studying the results of the so far conducted research on both regional policy and CAP. The study's results show that the impact on the supported region of both CAP and regional policy is weak and that there is a need for redesigning of these policies but it can be effective only if their new shape employs the approach of cooperation between these policies.

Keywords

convergence, EU development, CAP.

Introduction

Reducing differences in the level of socio-economic development of regions of the EU is one of the key objectives of the EU, for which the cohesion policy has been dedicating considerable financial resources. As mentioned by W. Molle (2015) Apart from leveling wealth disparities in the EU cohesion policy is to serve further balanced growth. Convergence in the development of EU countries and regions has been the subject of numerous studies. Rarely subject of study is, however, the impact on the coherence of the EU Common Agricultural Policy. This even applies CAP's impact on the coherence of European agriculture. Even studies on the problem of estimating the combined impact and interrelations of the CAP and regional policy are not a popular research subject. The exception is, among others, the publication prepared by R. Crescenzi et al. (2011), in which it was also noted that spending on the CAP and regional policy is approx. 90% of the EU budget, which demonstrates the importance of these policies among the objectives of the Community.

In this paper “regional policy” and “cohesion policy” are used interchangeably. This is a simplification given the fact that there are two separate funds: Cohesion Fund – offering support only to least off EU countries (so-called cohesion countries) and European Regional Development Fund – with support to all EU regions but with varying policy instruments and level of co-financing.

The aim of the study is to determine to what extent the CAP and regional policy can help in reducing the gap between the least and most developed regions in the EU. Evaluation of the impact of the CAP is based on analysis of the studies conducted so far – meta analysis method and the data concerning Poland as the example of a country in the last two programming period given one of the highest allocation of the EU funds. This should lead to establish the starting point for the reforms of both CAP and structural funds after the year 2020. As the development of both agriculture and rural areas cannot be separated from the whole economy therefore the CAP and cohesion policy have to cooperate closely. Given the fact that the idea

of the EU convergence of the socio-economic development is not often related to the CAP a large part of this paper is devoted to presenting this problem.

In the first part of the article a brief review of the concept of convergence in socio-economic development and of the studies on the impact of the EU regional policy on the process of EU convergence are presented. In the second part there are two sections. In the first of them a literature review on the impact of the CAP on the convergence of agriculture and EU regions is presented. In the second part shows using the example of Poland the impact of the level of the support received by the Polish regions within the CAP and cohesion policy on the scale of changes in their agricultural sector (number and size of farms) as well as their whole economy.

1. Literature review on convergence of the EU socio-economic development

Although cohesion policy has been implemented for a long time, it is still difficult to determine to what extent it is effective. Evaluation of this policy is very difficult, among others, due to the lack of data, the difficulty of separating the impact of other factors on the development of the analysed areas and the deadweight effect. This effect occurs when support is granted to entities that would have undertaken the supported projects even without receiving public funds. Examination of the scale and pace of convergence has become the subject of numerous scientific studies after the seminal publication written by R. Barro and X. Sala-i-Martin (1995), who focused on β convergence, which indicates that the less developed countries/regions grow faster than those that are already more advanced. A different form of convergence is also distinguished. It is called σ convergence and it indicates that countries/regions converge to the same level of economic development. Both types of convergence have their origins in neoclassical growth theory. As the results of research conducted by K. Dvoroková (2014) on EU-28 countries in the years 2001-2012 show, direction and scale of these two types of convergence are different.

Some authors use also γ convergence – for example: R. Dobrinsky and P. Havlik (2014).

A separate research problem is determining the scale of convergence. This applies especially to the ex-ante analyses trying to estimate the potential impact of planned support instruments. A serious modelling problem in these cases can be the theoretical assumptions. For example, in the neoclassical approach, it is recognized that the technology is widely available and the access to it is spread equally throughout the territory covered by the support. As noted by L. Polverari et al. (2014), there are four basic methodological approaches: macroeconomic modeling (to assess the added value of support), case studies, regression analysis and microeconomic studies using control groups. Due to different methodological approaches and the type of research methods used as well as the area and the period covered by the analysis different results concerning the impact of cohesion policy instruments on the development of EU regions can be obtained. For example, the ex-post analysis conducted using HERMIN model for the programming period 2000-2006 indicates that support under cohesion policy amounting to 1% of GDP could generate an increase in GDP of 1.1 to 4.2% by 2020 in the new Member States, and when using QUEST model the increase could reach 2-6,1% (Polverari et al., 2014). A review of results of research concerning the impact of the cohesion policy can be found in i.e. in: T. Hagen and Ph. Mohl (2009), M. Tomova et al. (2013), R. Crescenzi et al. (2011) and L. Polverari et al. (2014). In recent years a new model was developed that is to be applied in the research on the impact of cohesion policy on the development of the EU regions. The new model is called RHOMOLO and it is a dynamic spatial general equilibrium model. The specification of this model is presented in the paper by A. Brandsma et al. (2013). In the case of convergence of the EU regions, the research results are not conclusive. Some point to the existence of this

phenomenon (Beugelsdijk, Eijffinger, 2005) and others do not support this claim (Boldrin, Canova, 2001). A review of wide range of studies concerning the EU convergence conducted up to 2005 can be found in the paper by H-F. Eckey and M. Türck (2005). Probably the truth lies between these two extreme opinions and it is best expressed by the results presented by M. Battisti and G. De Vaio (2008) who stated that only in the case of a few regions an appreciable rate of convergence was visible and the majority of regions showed slow convergence, or lack of it. Still a major problem in assessing the role played by cohesion policy in the development of the EU regions covered by it is the lack of accurate statistical data at both regional and sectoral (Kancs, Brandsma, 2013).

2. CAP vs. the process of EU economic convergence

2.1 Literature review

The impact of the Common Agricultural Policy on the convergence process is rarely studied. The exception is the work on convergence within the agricultural sector, which include, among others, following publications: S. Alexiadis et al. (2013), F. Soares and R. Ronco (2000), R. Bivanda and R. Brunstad (2003) and L. Čechura et al. (2014). The results presented by F. Soares and R. Ronco (2000) show the absence of the positive impact of the CAP on the convergence of agricultural development. The researchers claim that it stems from a diverse range of support for particular types of production, which usually tend to be concentrated in particular regions. In contrast, the R.S. Bivanda and R.J. Brunstad (2003) pay attention to the issue of inclusion of agriculture and support given to this sector in the analysis of the convergence process in the EU and the methodological difficulties associated with it. However, as indicated by S. Alexiadis et al. (2013) in the case of labour productivity in agriculture there is a convergence of EU regions. Yet the results presented by L. Čechura et al. (2014) show that among the new member states that the substantial differences in total factor productivity (TFP) of agriculture persist both among and within these countries.

Studies on the impact of the CAP on territorial cohesion carried out by ESPON and related to the CAP in the form applicable at the beginning of the 21st century pointed to the fact that the first pillar of this policy negatively affects the process of convergence and the measures implemented within its second pillar are not able to offset this negative impact (ESPON 2004). The reported negative impact of the first pillar was associated with the method of awarding direct payments which are the main component of the first pillar of the CAP. The rates of these payments were based on the reference yield and were positively correlated with the volume of yields. Therefore, higher level of support was recorded in regions with a higher level of agricultural development, which is also associated with a higher level of development of the whole economy.

The Common Agricultural Policy evolves gradually and it still remains sectoral policy, not a territorial policy targeting given areas. Therefore, its instruments and method of allocating funds are not closely related to regional development. Moreover, as research conducted by R. Crescenzi et al. (2011) indicates the correlation between the level of funds flowing to a region under the regional policy and the CAP is falling. In the programming period 1994-1999 this correlation amounted 80%, in 2000-2006 it fell to 59%, and in 2007-2013 it reached only 50%. It is not possible yet to determine the correlation level for the programming period 2014-2020 because not all rural development programmes for this period have already been accepted by the European Commission.

In contrast, the study conducted by R. Crescenzi and M. Giui (2014) shows that the rural development policy is not closely linked to socio-economic development of individual regions. The positive impact of these policies on growth was recorded only in the most

developed regions. Also in relation to the CAP first pillar's instruments no direct link with economic growth of the EU regions was observed. At the same time, there was no negative impact on the convergence process, and in the case of the least developed regions a positive impact of direct payments on development of these areas was reported.

It is hard not to expect such results looking at the distribution of CAP measures. As noted by B. Camaioni et al. (2014) there is a clear imbalance in the scale of CAP funds going into specific regions of the EU. As these authors showed there was a bipolar distribution between less and more urbanized regions, with the more urbanized central regions receiving higher support per 1 ha of UAA.

2.2 CAP vs. economic convergence in Poland

In Poland the differences in economic development, labour productivity and income level between different types of regions are also profound. Therefore, it is worth investigating whether the inflow of EU funds leads to reduction of the differences. Given the limitations of this paper only some of the facts related to the scale of agricultural support and cohesion support in Poland will be presented in relation to changes in the agricultural sector and GDP of the Polish regions.

First of all it should be investigated whether there is any relation between the level of the CAP funds received and the agricultural structures in Polish regions. A simple way to verify the existence of such a relation is the comparison of the changes in the number and land size of farms applying for direct payments. The data presented in table 1 shows the decrease in the number of farms granted direct payments in the years 2005-2014 and the increase in their average size of UAA. Although direct payments were introduced in Poland in 2004 the largest number of applications was observed in 2005. After this year a steady decline in the number of application has been observed in all the Polish 16 regions with the exception of the year 2012 when a tiny increase – less than 500 applications – was observed. The general conclusion of the data presented in table 1 is that the regions with the biggest number of small farms observed the largest fall in the number of farms granted direct payments. As a direct consequence these regions also had the largest increase in the average farm size.

Table 1 Change in the number and average size of farms applying for direct payments in Poland in the period 2005-2014

Region	Number of farms in 2014	Decrease in the number of farms (%)	Average UAA in 2014 (ha)	Increase in UAA (%)
Dolnośląskie	56,124	10.2	15.3	9.0
Kujawsko pomorskie	64,497	7.4	15.8	6.6
Lubelskie	176,013	4.7	7.6	6.0
Lubuskie	19,748	6.8	19.9	11.4
Łódzkie	121,459	9.0	7.8	6.3
Małopolskie	120,933	14.3	4.1	10.9
Mazowieckie	205,773	6.9	8.9	4.9
Opolskie	27,458	9.3	18.1	9.5
Podkarpackie	116,336	10.8	4.5	9.6
Podlaskie	80,664	4.0	12.5	4.1

Region	Number of farms in 2014	Decrease in the number of farms (%)	Average UAA in 2014 (ha)	Increase in UAA (%)
Pomorskie	38,422	4.2	18.2	3.1
Śląskie	47,090	15.6	7.2	16.9
Świętokrzyskie	84,636	11.8	5.6	8.2
Warmińsko - mazurskie	43,121	1.2	21.8	-0.7
Wielkopolskie	120,380	3.8	14.0	2.9
Zachodniopomorskie	28,537	4.0	28.9	8.5
Poland	1,351,191	8.0	10.3	7.5

Source: Own calculation based on the data available at: www.arimr.gov.pl

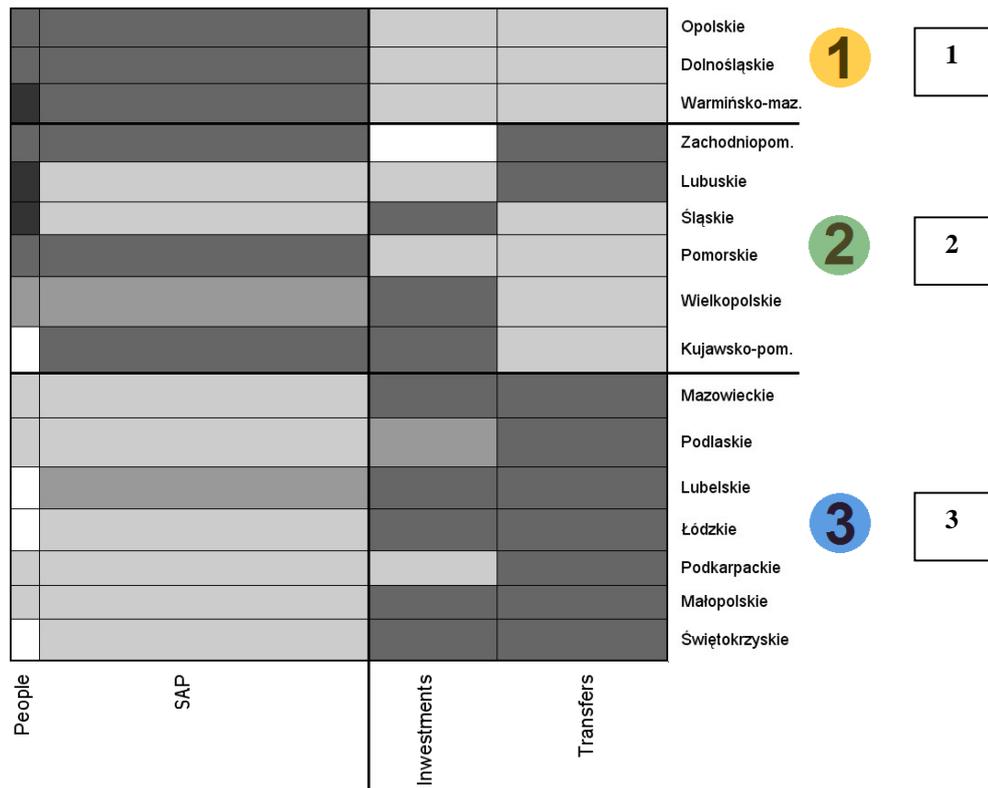
Looking at the level of all the CAP funds received by the Polish region differences in the structure of these funds can be observed. The CAP funds were divided into four groups. One included direct payments (for implication only single area payments were included). The three remaining groups included the measures of the second pillar implemented in Poland in the years 2004-2013. The division of these measures into these groups was based on the mechanism of their functioning in the categories distinguished in economics theory:

1. Transfers – including, among others: early retirement, agricultural producer groups, support for farming in mountainous areas and other areas less favoured areas (LFA) and agri-environmental payments.
2. Investments – including, among others: setting up of young farmers, modernisation of agricultural holdings, adding value to agricultural and forestry production.
3. Support for human resources: vocational training for persons employed in agriculture and forestry and use of advisory services by farmers and forest owners.

Applying Grade Data Analysis (GDA) the overrepresentation of the Polish regions in the share of a given group of CAP instruments was calculated. It allowed a division of the Polish regions into three clusters:

- Cluster 1 – regions: Opolskie, Dolnośląskie and Warmińsko-Mazurskie. It is characterised by a slight overrepresentation of the Single Area Payment and a slight underrepresentation of investments and transfers.
- Cluster 2 – regions: Zachodniopomorskie, Lubuskie, Śląskie, Pomorskie, Wielkopolskie and Kujawsko-Pomorskie. It is characterised by a rather equal distribution of payments (of both first and second pillar).
- Cluster 3 – regions: Mazowieckie, Podlaskie, Lubelskie, Łódzkie, Podkarpackie, Małopolskie and Świętokrzyskie. It is characterised by a slight overrepresentation of investments and transfers and a slight underrepresentation of the Single Area Payment.

The regions within the cluster 3 showing the lowest participation in SAP and highest in transfers are the ones with the smallest average size of farms and generally least developed agriculture (with the most vivid exception being the milk sector in Podlaskie region).



Source: B. Wieliczko (2014), Fig. 2.11.

Fig. 1 Funds received by Polish regions under the CAP in the years 2004-2013

As the results of the research conducted by J. Misiąg et al. (2013) showed the least developed Polish regions received more funds per capita than the more developed ones in the period 2004-2011. However, it did not lead to a faster GDP growth. It must be also stated that in the lower developed the region and its agriculture the lower was the share of the CAP in the total EU funds that were received by a given region (table 2). Thus, it can be stated that CAP could have less impact on the development of the poorest regions than other sources of the EU funds.

Table 2 Share of the CAP funds in the total amount of EU funds that flowed into a given Polish region in the period 2004-2011

Region	Share
Podlaskie	61.2
Lubelskie	55.3
Kujawsko-pomorskie	54.6
Wielkopolskie	54.1
Opolskie	49.2
Warmińsko-mazurskie	46.6

Region	Share
Łódzkie	44.9
Zachodniopomorskie	43.5
Mazowieckie	41.6
Świętokrzyskie	40.6
Dolnośląskie	39.4
Lubuskie	39.1
Pomorskie	37.6
Podkarpackie	29.2
Małopolskie	29.2
Śląskie	13.6
Poland – median	42.5

Source: J. Misiąg et al. (2013).

It is also worth showing the correlation between EU funds and the change of the chosen macroeconomic indicators (table 3). In the case of the GDP growth almost all categories of the EU expenditures show negative correlation. In the case of the CAP this negative correlation is the strongest. With the correlation relating to direct payments being the strongest. Given the above mentioned share of the CAP funds in the total funds it would suggest that the hardest hit were well off regions. This could mean that the resources employed in agriculture could be transferred to sector with higher productivity but thanks to the CAP they were kept in agriculture. Whereas in the less developed regions the resources of other sector were still not fully used and the CAP funds did not hinder their growth. The correlation of the EU funds and labour productivity is weak but still the highest in the case of CAP funds. It is worth underlying that it's slightly higher in the case of direct payments. As for the agriculture's final production the impact of the EU funds is almost invisible.

Table 3 Correlation between EU expenditure and GDP, labour productivity and agriculture's final production in Poland

Expenditure	GDP	Labour productivity	Agriculture's final production
Total expenditure	-0.590	0.181	0,063
Total expenditure without direct payments	-0.445	0.056	0,064
Structural funds and Cohesion Fund	-0.171	-0.166	0,092
Regional programmes	-0.503	-0.281	-0,184
Human capital	-0.594	-0.234	-0,220
Infrastructure	0.382	-0.032	0,334
Others	-0.046	0.477	0,033
CAP	-0.667	0.348	0,020
Direct payments	-0.737	0.370	0,049
Rural Development Programme	-0.567	0.312	-0,012

Source: J. Misiąg et al. (2013).

The correlation calculated for the period 2007-2012 between the amount received by different regions in the form of direct payments and the change in the amount of the GDP worked out in the agriculture was low: 0.208 and in the case of the second pillar even lower: 0.067. This shows that the impact of the CAP funds even on agriculture is insignificant (own calculations based on the data available at: www.stat.gov.pl).

Analysing the relations between cohesion policy and CAP or the impact of these two policies on the development of EU agriculture, its rural areas and whole regions it must be borne in mind that rural development is a complex issue. As stated by K. Góralach (2004) there can be distinguished five levels of rural development, including:

1. Global interaction between society and agriculture.
2. Internal dynamics of agricultural development.
3. Transformation at the level of farm and farmer's family.
4. Transformations at the level of rural communities, with a particular focus on the different role of local actors.
5. Functioning of various institutions, formulating and implementing by them all kinds of practices

This shows that in order to achieve visible effects in supporting rural development instruments targeting different levels of rural development need to be implemented.

Conclusions

EU cohesion policy despite the regularly introduced changes still remains a tool with limited strength and influence on the pace of the convergence process and the development of EU regions. The same applies to the CAP despite more or less visible changes in the direction of support offered within this policy.

Moving away from sectoral policy has long been a fact in the economic policy of almost all countries. In the case of the CAP – created as a typical sectorial policy – this shift meant adding to the CAP a component that is similar to regional policy. It is supposed to be some kind of an additional support for rural regions in their developed also supported through regional policy. However, in recent years, similarly as in the case of the EU cohesion policy, due to the budgetary and economic problems of many EU countries and the unsatisfactory effects of existing policy instruments there is a number of questions concerning the right shape and character of the rural development policy. These questions, i.e. include: 1. Which approach can lead to better results place-based or space-blind policy?; 2. Should the policy focus on efficiency or equity?; 3. Should the policy lead to rising competitiveness or increasing convergence? As suggested by R. Camagni and R. Capello (2015) cohesion policy should be shaped in such a way that it gives individual regions the tools to make the fullest possible use of their own developmental potential.

This approach means that there is a need for individually adjusted support instruments used in a given region. It means that there is not only the necessity of having the data at the appropriate level of detail, but also there will appear additional costs for public finances related to the development of distinct support programmes, as well as their implementation, monitoring and control. Therefore, it should be considered to what extent it is still possible to standardize various support mechanisms and at the same time make adjustments to local needs by different eligibility criteria and scale of support both for regions and individual beneficiaries which will reduce transaction costs borne by the state.

The analysis of the impact of the scale and structure of CAP and total EU support targeted at different regions presented in this paper on the example of Poland shows only some elements that should be considered in the study on existence of the convergence process in the EU regions and the role played by the EU policies in reducing disparities in socio-economic

development. Moreover, it must be also analysed whether there is possibility that the way the EU support is used does not create a trap of the lack of sustainable supply effect. Such a trap can appear if the support funds do not trigger a lasting growth and the future support is lower. In the case of a lack of such growth there is a possibility that the so far supported economy has no sufficient resources to sustained the infrastructure not to mention its development (G. Gorzelak, 2015).

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