ECONOMIC ASPECTS OF LFA AND ORGANIC FARMING PAYMENTS IN LATVIA

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Less favoured area (LFA) payments and organic farming (OF) payments represent a third of all public funding available for RDP 2007–2013 in Latvia and are used by about two-thirds of all farms. The aim of the study is to assess the economic impact of LFA and OF payments. The data from Rural Support Service, FADN and statistics of agricultural sector were used to conduct the study. A group of farms receiving support payments was compared with a group without this kind of support, in order to evaluate the impact of support payments. The results show that LFA payments have facilitated a significant income growth, especially for small farms. They have also contributed to more intense use of the land. Since OF support has not contributed enough to the agricultural production, direct payments to production will increase economic impact of support payments.

Keywords: Common Agricultural Policy, Farms, Less Favored Areas, Organic farming, Utilized Agricultural Area.

JEL Codes: O13, Q15, Q18.

1. Introduction

The area payments may be considered as a relatively new type of support not only in Latvia, but also in EU and elsewhere in the world, and they rapidly became popular mainly at the beginning of this century as the solution in the situation, when the income of the farmers needed to be maintained, at the same time trying to avoid overproduction and useless consumption of the resources.

Previously dominating support of prices (or any other production-related support) was intensely criticized not only as the phenomenon deforming the market, which is at the same time also expensive and inefficient for the society in general (Neal, 2007), but also as being the most harmful to environment type of support (Chauffour, 2008).

Support, related to the land (area payments) came as the solution in this situation. That such type of support is rather new, so far-reaching conclusions regarding its impact should not be made. The conclusions drawn as the result of the existing studies are not unequivocal. The study conducted in Germany (Happe, 2008) allows concluding that separated payments significantly impact the structure of the farms.
They negatively impact the farms, wherein the production is not cost-effective, because they are forced to discontinue this production. Resources thereby become available to other farms, and this can facilitate an increase of efficiency and income in the profitable farms. OECD report states that the deficiency of the area payments is that they for the most part are received by the land owners, but have very little impact on the income of the lessees of the land, among which the poorest farms can be found (OECD, 2002). The situation in Latvia in this regard is opposite, because the land is leased mostly by the large farms: in the group of the smallest farms (with standard output (SO) up to 4 thousand EUR) only 7% of the used UAA is leased, while in the group of large farms (SO over 100 thousand EUR) – 55% (Central ... , 2011).

Publications list significant deficiencies also for the structural measures, including investment support, for example, by subsidizing purchase of production resources, approximately ¾ of the end recipients of subsidies are producers or suppliers of resources, thereby these subsidies are not reaching the agricultural sector (Upite, 2010). OECD report in this regard states that the prices of the agricultural products drop as the result of decrease of the costs due to modernization of production, and the producers, who have not been able to adapt to the new production methods, suffer reduction of their income (OECD, 2002). If the public support is directed only to a part of the farms (for example, the largest), it will facilitate economic stratification – a part of the farms will become even more competitive, while the income of others will reduce, creating unequal competition, and this is an unwelcome situation from the perspective of the balanced development of the state.

Area payments in Latvia are more available to the smaller producers than the investment support, because the area payments of the Rural Development Programme (RDP) 2007–2013 in comparison with other types of support are used by majority of the farms – this kind of support was received by 67.6 thousand farms or 81% of all farms included in the statistics. The measure 2.1.2 „Payments to Farmers in Areas with Handicaps, other than Mountain Areas” or LFA payments was the only type of RDP 2007–2013 support applied for by approximately 50 thousand farms. Organic farming (OF) support is financially the most significant Agri-environment measure, and it plays the greatest role in the income of the farms among all area payments. The aforementioned types of support are therefore considered as the area payments with the greatest economic impact, the size whereof is important to be determined, in order to plan the appropriate payments in the next periods.

Production is a topical issue both in Latvia and in the EU in general in relation to OF sub-measure. The results of several studies show that carrying out organic farming in comparison with conventional farming for most part has a more positive impact on environment, if we look per area unit, but not always per production unit (Tuomisto, 2012). Since the demand for food increases in the entire world, production volume most likely will need to be increased as well (Royal..., 2009). More extensive farming will facilitate reaching environmental goals, but can increase production intensity in other areas of land. Such conclusions create the challenges and various alternatives in the land use policy in relation to development of the agricultural
industry, nature conservation and production of bioenergy and forestry (Berlin un Uhlin, 2004), specifying, which areas should be used for intensive production and which – for extensive (Tuomisto, 2012).

Hypothesis of the study prescribes that LFA and OF payments provide important economic support to farms – recipients of this support, the importance of these payments cannot be therefore rated only from the point of view of environmental goals, but their impact on the economic situation of the farms must also be taken into consideration. The authors so far have not seen a broad enough analysis of these issues both in Latvia and in Europe.

The aim of the study is to evaluate economic impact of the support to less favoured areas and to organic farming provided to the farms – recipients of support in the scope of Rural Development Programme 2007–2013.

The object of the study is the rural farms of Latvia. The subject of the study is the LFA and OF payments made in the scope of the Rural Development Programme.

The findings may be used in the planning of CAP.

2. Methodology

EU guidelines for evaluation of economic impact have not been developed for the area payments. At the same time, there are 3 common impact indicators intended for the impact evaluation of the entire RDP 2007–2013, and they are as follows: economic growth, employment creation and labour productivity (Schuh, 2011). The main indicator used in this study is net value added (NVA), since it is connected with all three recommended impact indicators, and shows the actual economic potential of the farms and its changes. Share of these payments in the net turnover of the farms – support recipients is used as an indicative indicator, showing comparative economic importance of the area payments, and the share of the received support in NVA is also evaluated. Other indicators used – preservation of farms and production of organic products – are important from the perspective of the common goals of the rural development.

Methodology for the calculations is selected with a purpose to comply with a methodological requirement – to evaluate net benefit of participants of the program (Schuh, 2011; Pufahl, 2009). It is performed by comparing the farms – recipients of support with similar farms, which have not received this kind of support (control group).

The main data sources are FADN and Rural Support Survey (RSS) databases, and also Central Statistical Bureau of Latvia (CSB). Grouping of the farms based on their size is done using the economic size groups, applying standard output (SO). The article describes the following groups: very small farms (SO up to 4000 EUR; FADN data is not available about them), small farms (SO 4000 up to 15000 EUR), medium small farms (15000 up to 25000 EUR), medium farms (25000 up to 100000 EUR) and large farms (starting from 100000 EUR).

Farms are broken down by their specialization, taking into account the classification provided in the data sources (CSB and FADN). Only those specialization
groups are included in the analysis of economic data, which had sufficient number of representatives (at least 10 farms).

Only the farms located in LFA areas are entitled to receive LFA payments. Pursuant to the current breakdown (in effect between 2004 and 2013), LFA area takes up 74% of the total area of the country. It contains 79% of the number of farms registered in country and 73% of UAA of the farms (CSB, 2011). It is important to note that the structure of the farms existing in LFA areas is different in comparison with those outside LFA areas, and also this is different among LFA categories.

Number of farms in each LFA category and their breakdown by the economic size groups is provided in the Table 1.

Table 1. Number of farms in LFA areas and outside them, UAA as well as breakdown of the farms by the size groups (2010)

<table>
<thead>
<tr>
<th>Type of area</th>
<th>Farmland area, (thsd. ha)</th>
<th>Number of farms, (thsd.)</th>
<th>Share of farms by economic value, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>LFA total</td>
<td>1528</td>
<td>65.5</td>
<td>75 18 3 3 1</td>
</tr>
<tr>
<td>LFA 1</td>
<td>229</td>
<td>7.2</td>
<td>67 20 5 6 2</td>
</tr>
<tr>
<td>LFA 2</td>
<td>703</td>
<td>28.0</td>
<td>71 20 4 4 1</td>
</tr>
<tr>
<td>LFA 3</td>
<td>596</td>
<td>30.3</td>
<td>79 16 2 2 0.5</td>
</tr>
<tr>
<td>Not LFA</td>
<td>606</td>
<td>17.7</td>
<td>70 18 4 6 3</td>
</tr>
<tr>
<td>Total</td>
<td>2133</td>
<td>83.3</td>
<td>74 18 3 4 1</td>
</tr>
</tbody>
</table>

We can see from the data of the table that the greatest number of farms is located in LFA 2nd and 3rd category – total of 70% of all listed. There is also a trend – upon increase of LFA category (i.e. from favourable to less favourable conditions for agricultural activity), a share of smaller farms increases in the structure of farms, while the share of the large farms reduces. It can especially be observed in LFA 3rd category, wherein the proportion of medium farms is the smallest, and the number of large farms is only 145 (0.5% of all LFA 3rd category farms), while 476 large farms (2.7% of all) are recorded outside LFA.

3. Data and Results

Analysis of LFA support results

Support for LFA in Latvia, just as common in EU countries, was the second largest RPD measure based on the amount of the funding during the period of 2007-2013 – EUR 269 million (19.4% of RDP and 55% of Axis 2 area payments) were provided for it. The purpose of this support is to compensate additional costs and foregone income of the producers of agricultural products, related to unfavourable conditions for the agricultural activity in the respective area.

An analysis of the changes to the number of farms outside LFA and in the LFA areas shows that the number of farms has decreased slower in the areas receiving
LFA support than in the areas without such support (Figure 1). This allows to make an assumption that LFA support has helped to maintain the operation of large number of rural farms. The number of maintained farms is greater upon increase of LFA category and thereby also the amount of support.

Applying LFA support to the average net turnover of the farms in 2007–2011, we can see that LFA support forms 3.6% of the net turnover of the farms- recipients of this support. This is the third largest result among all area payments after OF support (13.2%) and single area payments (SAP) (6.3%) – the latter is not paid from RDP funding; therefore it is not included in this analysis.

At the same time, a breakdown of the farms by size groups (Table 2) shows that the impact of LFA support to the smaller farms has been more significant.

![Fig. 1. Number of farms and its changes in breakdown by LFA categories](image)

For example, NVA in the small farms without LFA support has rapidly decreased during the period between 2008 and 2012 – by 35%, while in the farms with this support – by 10%.

The results obtained regarding a share of LFA support in NVA of the farms of various specializations show the very important role of this support in the field crop farms – the support of this measure in these farms in 2008–2012 has formed in average of 18.4% of NVA, but in 2009 – even 43%. Changes to NVA in dairy farms and those of mixed specialization in LFA areas and outside them were more similar (increase of NVA in dairy farms was established in LFA areas, while in the farms of mixed specialization – exactly opposite). Although, LFA support still played a significant role in formation of NVA of the farms of these specializations – LFA payments in 2008–2012 formed in average of 11.5% of the NVA of the dairy farms, while 9.4% of NVA in mixed specialization farms.
Table 2. NVA and its changes in FADN farms selected for evaluation, depending on LFA status and the size of farm in 2008–2012 (in average in the farm, EUR)

<table>
<thead>
<tr>
<th>Group of farms/ type of area</th>
<th>Net value added (NVA), thousands EUR/farm</th>
<th>NVA changes 2012/2008, %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2009</td>
</tr>
<tr>
<td>Small farms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>without LFA support</td>
<td>5.0</td>
<td>5.9</td>
</tr>
<tr>
<td>with LFA support</td>
<td>7.5</td>
<td>6.3</td>
</tr>
<tr>
<td>share of LFA support, %</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Medium small farms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>without LFA support</td>
<td>8.9</td>
<td>10.7</td>
</tr>
<tr>
<td>with LFA support</td>
<td>10.4</td>
<td>8.8</td>
</tr>
<tr>
<td>share of LFA support, %</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Medium large farms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>without LFA support</td>
<td>25.1</td>
<td>11.9</td>
</tr>
<tr>
<td>with LFA support</td>
<td>22.8</td>
<td>16.5</td>
</tr>
<tr>
<td>share of LFA support, %</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>Large farms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>without LFA support</td>
<td>204.9</td>
<td>119.6</td>
</tr>
<tr>
<td>with LFA support</td>
<td>157.0</td>
<td>87.0</td>
</tr>
<tr>
<td>share of LFA support, %</td>
<td>10</td>
<td>20</td>
</tr>
</tbody>
</table>

It must be noted that limiting volume of FADN selection group did not allow the creation of control group for the grazing livestock farms (other than dairy farming), but the fact that the share of grazing livestock farms in farm’s structure is greater in LFA areas than outside them, indirectly shows the favourable impact of payments on them.

**Analysis of support to organic farming**

OF is one of the Agri-environment sub-measures – it is financially the largest, therefore also the most significant from the economic point of view. Agri-environment payments pursuant to RDP 2007–2013 facilitate development of the rural areas and ensure environment and rural landscape availability to the society.

75% of support of RDP 2007–2013 Agri-environment sub-measures is disbursed as OF payments, and despite a small reduction of the number of recipients, the disbursed amount has a trend to year-by-year increase – the amount of disbursed support in 2012 has increased by 63% or by EUR 8.6 million compared to 2007. The supported areas have also increased during this time from 148 thousand ha to 178 thousand ha (by 30%). As number of recipients during this time has decreased by 14%, it shows that the concentration of production takes place, and a large portion of farms is undergoing development, including by increasing their areas of land. Average supported area per one recipient has increased from 34.6 ha in 2007 to 52.6 ha in 2012 (by 52%).
In order to find out the role of OF support in the economic indicators of farms, FADN data on the level of support recipients were analysed. Data on 125 farms registered by FADN, which have received OF support in 2008–2010, were selected.

Collected data shows that NVA of the recipients of OF support per employee increased by 22.5% (from 7304 to 8954 LVL/annual labour units) during the period between 2008 and 2011, thereby exceeding average indicators of conventional farms, but the indicators of the latter have significantly increased in 2012, while those of the organic farms have even slightly decreased. Further analysis (taking into account the specialization of the farms) indicates that the aforementioned difference in 2012 may be explained mostly by the different structure of the industries – specialization in field crops is more often to be seen among the conventional farms, wherein a rapid increase of income was observed in 2012 due to the increase of prices for the field crops. NVA indicators of the farms, using the method of organic farming or switching to it, and not having received any OF support in any of these years due to some reason, in the period of 2009–2011 have formed approximately half of the size of those for the recipients of OF support. NVA per full time employee in these farms in 2012 forms 68% of the level of those farms receiving DOF support. It emphasizes the importance of OF support to ensure competitiveness of the organic farming method in comparison with conventional agriculture (Figure 2).

Upon evaluation of the role of support in formation of NVA in organic farms, we can conclude that OF contribution to it is even greater than it was with LFA. OF support in 2008 – 2011 was forming approximately 24.5% of NVA in supported farms (in the group of small and medium small farms – even 33.5%). The share of support in the value added of organic farms has a trend to increase – from 15% in 2008 to 28% in 2011.

Fig. 2. NVA per labour unit (NVA/AWU) in 2008–2012 in the farms receiving OF payments; in the farms stating that they are engaged in organic farming, but do not receive support; as well as in the conventional farms, EUR per year
Since support rates have not significantly changed during the period of 2007–2013, an increase of support share in the income indicates that the portion of the earnings from market in the income of the farms reduces. This problem is confirmed also by analysis regarding the volumes of organic products and their dynamics in comparison with the changes to the areas applied for support. The areas of organic farms (together with the farms in transition) in 2012 reached 195 thousand ha, which is 12% of the areas applied for SAP (whereof OF support is paid for 178 thousand ha), while only 7.9% of milk, 4.1% of meat, 4% of potatoes, 2.7% cereals, 1.3% of fruit and vegetables, 0.2% industrial crops and 0.1% of eggs were produced in organic farms. Only production of honey in the organic farms is significant (21% of total production), but its proportion in the total structure of products is small.

4. Conclusions

Evaluating the obtained results from the point of the main goal set by Latvian RDP 2007–2013 – “prosperous people in sustainable populated rural areas”, support analysis allows making the following conclusions:

1. A significant advantage of LFA payments compared to other support types of RDP 2007–2013 is their availability to small farms. It is important, that these small farms with LFA support are shown the largest increase of NVA compared to the control group. Farms in LFA target areas have maintained their activity to a greater extent than outside them.

2. Upon evaluation of the farms of various specializations, LFA payments are the most significant in the field crop farms, while their importance in development of grazing livestock farms can also be noted.

3. Organic farming payments has ensured that the value added of the organic farms per employee is similar to that in conventional farms; the share of organic farms in farm structure is therefore stable, while the area of their agricultural land increases.

4. The current OF support, the amount whereof depends only on the areas, has not sufficiently stimulated increase of the production of organic products; the additional support instruments would therefore be useful for reaching this goal.

References


EKONOMINIAI MAŽIAU PALANKŲ ŪKININKAUTI VIETOVIŲ IR EKOLOGINIO ŪKININKAVIMO IŠMOKŲ ASPEKTAI LATVIJOJE

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Santrauka


Reikšminiai žodziai: Bendroji žemės ūkio politika, ūkių, mažiau palankios ūkininkauti vietovės, ekologinis ūkininkavimas, žemės ūkio naudemenos.

JEL kodai: O13, Q15, Q18.