

## ASSESSMENT OF INVESTMENT PROJECTS IMPLEMENTED BY FARMS IN ZEMGALE REGION

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**Abstract.** The research aim is to analyse the use of EU project funding in the agricultural industry in Latvia in the period 2007-2016 and assess the effect of investment projects implemented by agricultural holdings in Zemgale region on the financial performance of the holdings. The research analysed the legal acts regulating the implementation of support measures under the Rural Development Programme in the programming periods 2007-2013 and 2014-2020 and calculated the financial performance and competitiveness indicators (average profit margins, solvency and financial dependence) of agricultural holdings in Zemgale region, which were compared with the national averages, based on FADN statistical data. Methods of research: monographic, graphic, analysis, synthesis, statistical analysis. The analysed indicators were grouped by planning region in Latvia (the regional division of the Rural Support Service (RSS) – the Regional Agricultural Departments – was taken into account). Based on the research findings, the authors conclude that in the programming period 2014-2020 a solution is sought to retain the existing farm structure, strengthening small farms and reducing the influence of large farms on the agricultural industry. Even though public funding is focused on investment in tangible assets in the programming period 2014-2020, it is intended not only for agricultural holdings but also for forestry and food processing enterprises. The research has found that if other circumstances remain unchanged, there is no causal association between net value added and the amount of investment subsidies – the reason of a decrease in both variables was the consequence of the 2008 crisis. The average financial dependence of farms in Zemgale region in the period 2007-2013 exceeded the maximum level, and the farms were considerably dependent on borrowed capital. The research developed recommendations for the Ministry of Agriculture of the Republic of Latvia with regard to criteria for the evaluation of support project submitters, proposing excluding enterprises with high financial dependence from participation and contributing to the competitiveness of agricultural holdings and their financial independence.

**Keywords:** EU funds, Latvia, Zemgale region.

**JEL code:** O18, R11, R51

### Introduction

Total funding for measures of the Rural Development Programme (hereinafter the RDP) for farmers and rural entrepreneurs in Latvia in the programming period 2014-2020 reached EUR 1.5 bln., which was 11 % more than the available funding in the previous programming period (from 2007 to 2013) (*Eiropas Savienības atbalsts...*, 2016). Consequently, the enterprises of the agricultural industry actively use the available funding, including for investment projects, and purchase or replace obsolete equipment and machinery, purchase agricultural land and livestock, as well as construct or reconstruct production facilities and structures in order to enhance their competitiveness in the market. A comparison of the use of funding of the EU Funds (the ERDF, the ESF and the CF), measured in EUR per capita, for investment projects in Zemgale region municipalities in the period 2007-2015 with the average in Central and Eastern European (CEE) countries revealed that it was 23 % higher in the centres of national significance (Jelgava, Jekabpils) and 33 % higher in municipalities (with no centre of regional significance) with a population of more than 5000 (Jakusonoka, Rivza, 2017). The projects implemented in the territory of the Zemgale Regional Agricultural Department (hereinafter the RAD) in terms of amount and number has demonstrated a positive trend, yet their effect on the overall financial situation in agriculture has not been examined sufficiently.

The research aim is to analyse the use of EU project funding in the agricultural industry in Latvia in the period 2007-2016 and assess the effect of investment projects implemented by agricultural holdings in Zemgale region on the financial performance of the holdings.

Information sources: regulations of the EU Council, laws and other legal acts of the Republic of Latvia, research papers available in international proceedings, national statistical data, FADN statistical data, secondary information sources and published materials of institutions and organisations.

The research analysed the legal acts regulating the implementation of support measures under the Rural Development Programme in the programming periods 2007-2013 and 2014-2020. Based on FADN statistical data, the research calculated the financial performance and competitiveness indicators (average profit margins, solvency, financial dependence) of agricultural holdings in Zemgale region, which were compared with the national averages, and assessed their changes and effects in the analysis period of 2007-2015.

Methods of research: monographic, graphic, analysis, synthesis, statistical analysis. The analysed indicators were grouped by planning region in Latvia (the regional division of the Rural Support Service (RSS) – the Regional Agricultural Departments – was taken into account). In terms of funding per project, the projects of farms supervised by the Zemgale RAD were the largest among the regions both in the period 2007-2013 and in the period 2014-2016, exceeding the national average at least by 75.5 %. For this reason, the projects implemented in Zemgale region in terms of funding received considerably affected the dynamics of development of agriculture. Accordingly, an examination of the data on Zemgale region allows judging the effect of EU funding attracted.

## **Research results and discussion**

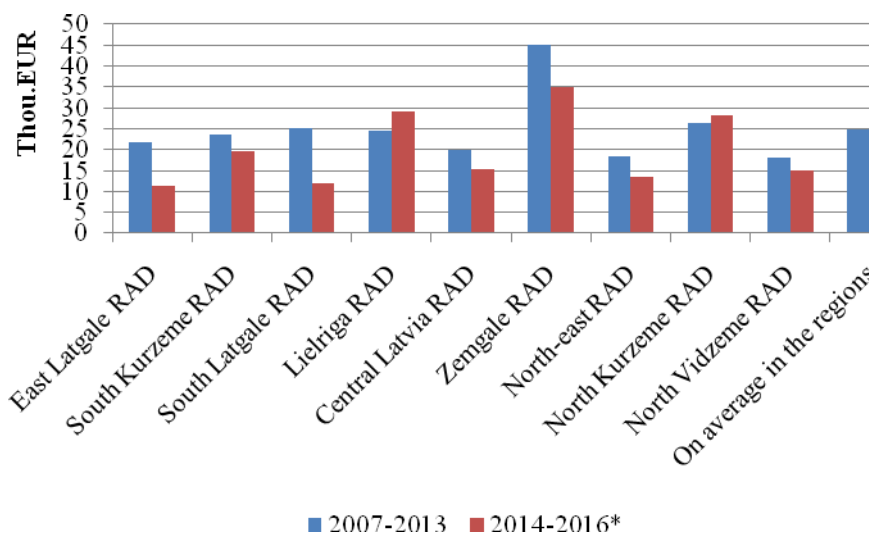
Many economists stress that in preparing and implementing public projects, it is important to contribute to sustainable development, rural and regional development, reduce poverty, ensure equal opportunities for all members of society and achieve other national strategies and targets, and in the case of limited financial means, it is necessary to choose investment alternatives, i.e. to evaluate the public projects in economic terms (Aleknevičiene, Baranauskienė, 2014). It is also necessary to assess the effect of EU funding on the GDP of Latvia and economic growth in the regions (Rivza, Kruzmetra, Zaluksne, 2016; Jakusonoka, Rivza, 2017). The need for a complex approach has been stressed by experts in the 2007-2013 ex-post evaluation by the RSS published in 2016, which stated that "given the many aspects of rural development (including the formation of an environment for entrepreneurship, the tax policy etc.), the RDP cannot make significant effects, and it is necessary to apply a complex approach to rural development through cooperation among all national institutions that can affect the development of entrepreneurship in rural territories. Densely populated and economically active rural areas have to be set a national priority" (Zinojums Lauku attīstības..., 2016). The measures are planned and implemented within the EU common regulatory framework, and in the programming period 2014-2020 the activities and measures of the Rural Support Policy (RSP) are regulated by totally 14 EU legal documents.

The agricultural policy of Latvia as an EU Member State is based on the supportable measures of the EU CAP (Financing the Common..., 2017; Kopeja lauksaimniecības..., 2016; Lauku attīstības..., s.a.); besides, it is strongly linked with the priorities of the National Development Plan. In the period 2014-2020, rural development in Latvia is strongly linked with the rural development

priorities set by the EU: promotion of agricultural competitiveness; sustainable management of natural resources and the implementation of climate measures; achievement of balanced development of the rural economy.

In examining the role of investment projects implemented by agricultural holdings in contributing to their competitiveness, it is important to analyse the amount of and priorities for funding allocated in the programming periods. As pointed out by Tisenkopfs et al. (2015), the key priority in rural development both in the programming period 2007-2013 and in the programming period 2014-2020 is investment in modernisation activities. The only difference is that the RDP 2007-2013 focused on the modernisation of small agricultural holdings, allocating public funding of EUR 368.9 mln., i.e. 26.2 % of the total funding allocated. However, even though public funding is focused on investment in tangible assets in the programming period 2014-2020, it is intended not only for agricultural holdings but also for forestry and food processing enterprises.

Furthermore, the amount of funding allocated under the RDP 2014-2020 for modernisation exceeds the amount of public funding available in the programming period 2007-2013 by 32.6 %, amounting to EUR 489.1 mln. or 32 % of the total financial support for rural development. The support amount of the European Agricultural Fund for Rural Development (EAFRD) is shown in Figure 1.



\*Data for the period through 31.12.2016 within the programming period 2014-2020.

Source: authors' construction based on operational information published by the Rural Support Service, s.a.

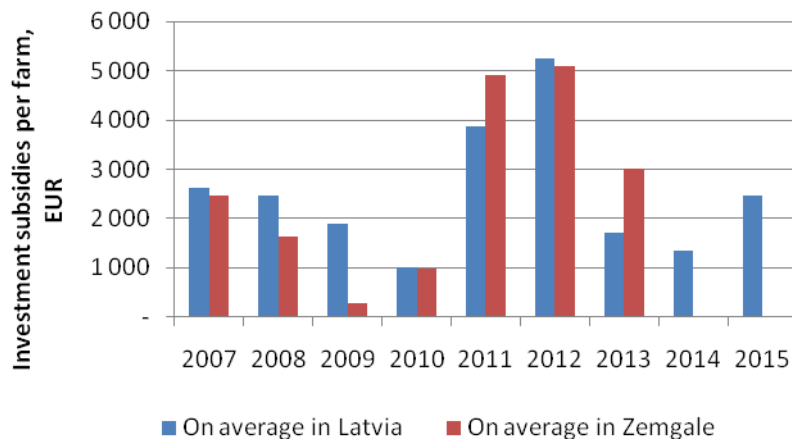
Fig. 1. EAFRD support funding per project by Regional Agricultural Department territory in 007-2013 and 2014-2016, thou. EUR

The key priority is small agricultural holdings with a turnover of less than EUR 70 thou.; the amount of funding allocated reaches EUR 68.6 mln. (14 % of the total funding available for modernisation). The purpose of the priority is to support investment in the restructuring, diversification and efficiency enhancement of agricultural holdings. The authors conclude that in the programming period 2014-2020 a solution is sought to retain the existing farm structure, strengthening small farms and reducing the influence of large farms on the agricultural industry.

Changes in the average amount of investment subsidies per agricultural holding in Zemgale region are presented in Figure 2.

An analysis of the average size of investment projects per farm in Zemgale region and in the entire country reveals that there was no considerable difference. In the period 2007-2013, the

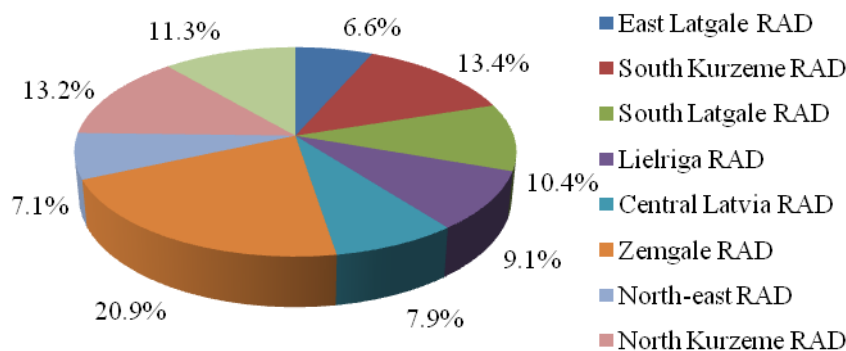
average investment by farms in Latvia was 2687 EUR , while in Zemgale region it was EUR 2631. Of the total amount of funding available for modernisation, EUR 489.1 mln., only 18.3 % were absorbed in the period through the end of 2016 (Operativa informacija par..., s.a.).



Source: authors' construction based on FADN data, 2007-2013.

Fig. 2. Average amount of investment subsidies per farm in Zemgale region and in Latvia, EUR

It is possible to conclude that at the beginning of the programming period 2014-2020, due to the slow EU funding administration process, the absorption of the funding was considerably behind the schedule and the implementation of modernisation activities was postponed. The percentage breakdown of public funding disbursed by RAD territory under the measure "Investment in tangible assets" in the period from 2014 to 31 December 2016 is presented in Figure 3; in some RAD territories, the absorption rate was only 7 % of the planned amount in the period 2014-2020 (Figure 3).



Source: authors' construction based on operational information published by the Rural Support Service, s.a.

Fig. 3. Percentage breakdown of total public funding invested in projects implemented under the measure "Investment in tangible assets" in the programming period 2014-2020 (as of 31.12.2016) by RAD territory, %

As of 31 December 2016 in the programming period 2014-2020, 2160 projects were implemented among all the activity groups under the measure "Investment in tangible assets". The largest number of projects (343) was implemented in the territory of the South Latgale RAD, while the third largest number, behind South Kurzeme (312), was implemented in the territory of the Zemgale RAD (290 or 13.4 %). The amount of public funding, EUR 18.7 mln., disbursed in the territory of the Zemgale RAD considerably exceeded those disbursed in the other RAD territories,

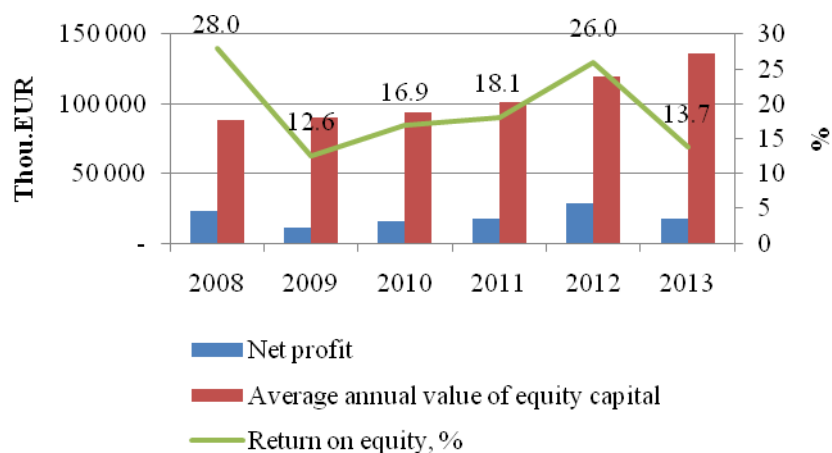
ranging from EUR 5.9 mln. in the East Latgale RAD (6.6 %) to EUR 11.9 mln. in the territory of the South Kurzeme RAD, or 13.4 % of the total financial support disbursed.

Besides, the largest amount of funding attracted for modernisation both in the programming period 2007-2013 and in the period from 2014 to the end of 2016 (under the RDP 2014-2020) was reported in Zemgale planning region. The most active recipients of funding located in the territory of the Zemgale RAD were agricultural, processing and forestry enterprises.

Of the total amount available in the period 2014-2016, EUR 18.7 mln. or 20.9 % were absorbed in Zemgale region, yet there is a significant difference if measured per farm. In the group of large farms (with a net turnover of more than EUR 70 thou.), the maximum amount of support disbursed for a farm reached EUR 2 mln., and the large grain farms of Zemgale region used almost the entire amount of funding, leaving an insignificant share of the funding for smaller ones.

In a situation where investment projects, especially for modernisation, have a support intensity of less than 50 % of eligible costs, investments in farm development could be made only by means of borrowed capital. However, investment support is granted to the farms demonstrating good financial performance; consequently, a sufficient amount of capital has to be at the disposal of the farms in order to ensure their continuous operation in the case of having financial obligations as well.

The research analysed to what extent the average return on equity of enterprises enhanced or worsened in the period from 2007 to 2013. Changes in the return on equity and in the components of the return on equity – net profit and the average annual value of equity capital – for farms in Zemgale planning region in the period 2008-2013 are presented in Figure 4.



Source: authors' construction based on Farm Accountancy Data Network information, 2007-2013.

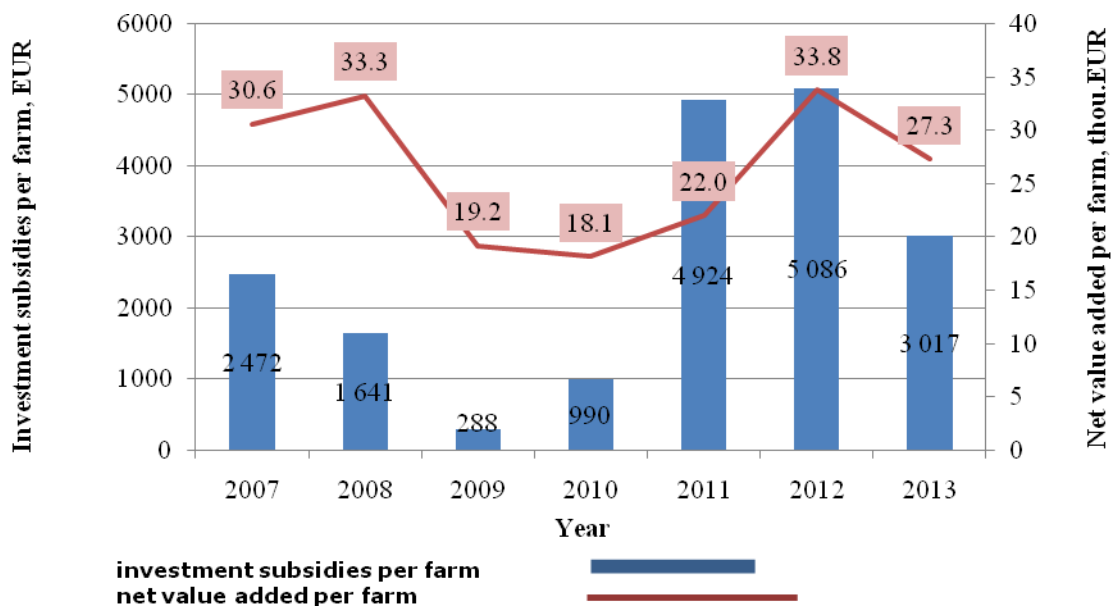
Fig. 4. Changes in the return on equity and in the components thereof for agricultural holdings in Zemgale region in the period 2008-2013, thou. EUR

It has to be taken into account that 2007 was a successful year for crop farmers; there were high crop yields and an unexpected grain price hike. For these reasons, the levels of 2007 as the base levels have to be cautiously viewed, considering the dependence of agriculture on weather conditions.

Continuing examining the contribution of farms that have implemented investment projects to the agricultural industry, the authors point to the role of turnover or commercial profitability. An increase in revenue not always leads to the desired amount of profit, which is determined by the production cost level.

An essential indicator of the competitiveness of agriculture is net value added per enterprise. The effect of investment support payments on net value added per farm in Zemgale region is shown in Fig. 5.

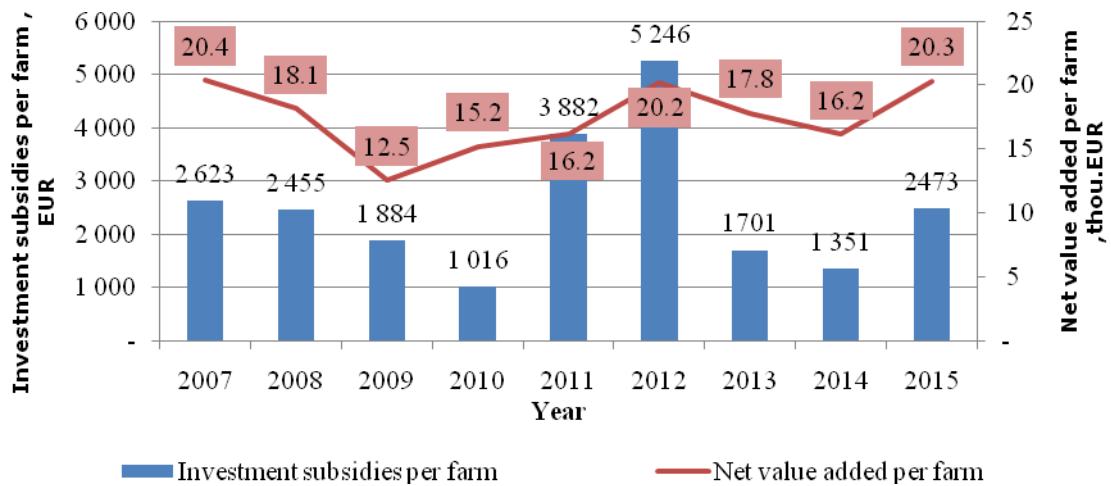
An analysis of the amount of investment subsidies received and value added generated per agricultural holding in Zemgale region reveals sharp changes in the amount of support mainly due to the financial crisis – from EUR 288 in 2009 to EUR 5.09 thou. in 2012. A decrease in the amount of investment subsidies per farm in 2009 compared with 2008 reached 82.4 %; besides, the sharpest decrease in value added generated by farms was reported in 2009, at 42.3 %.



Source: authors' construction based on Farm Accountancy Data Network information, 2007-2013.

Fig.5. Changes in investment subsidies and net value added per farm in Zemgale region from 2007 to 2015, EUR

Overall, the amount of investment subsidies from 2007 to 2013 rose by 22.0 %, yet net value added per farm decreased by 10.8 % in the analysis period. Accordingly, the authors conclude that an increase or a decrease in the amount of investment subsidies does not affect changes in net value added. The key reason for such a phenomenon is the low proportion of investment in total net value added; since the net value added of farms is considerably higher than the amount of investment subsidies (on average, 9.8 % of the net value added in the analysis period), the effect of the support, on average, on value added generation is insignificant.



Source: authors' construction based on FADN data, 2007-2015.

Fig. 6. Changes in investment subsidies and net value added per farm in Latvia from 2007 to 2015, EUR

However, an analysis of the average amount of support received and net value added generated per farm in Latvia as a whole (data for Latvia as a whole are available for a longer period than the data for Zemgale region) reveals some causal association between the variables.

The effect of investment support payments on net value added generated per farm in Latvia is shown in Figure 6.

After analysing the relative increase in the variables in the period 2007-2015, the authors conclude that in the entire period, except for 2010 and 2011, an increase or a decrease in the amount of investment subsidies leads to an increase or a decrease, respectively, in net value added. This could be explained by the fact that the proportion of subsidies received on average per farm in the average net value added per farm is higher nationally than in Zemgale region, where the net value added was 33.0 % higher than on average nationally. Besides, the data for Latvia as a whole are available for a longer period, i.e. two more years, therefore the crisis did not make so significant effect on the variables as the amount of investment subsidies paid to Zemgale region farms on the net value added of the farms did.

In terms of net value added, the indicator values for Zemgale region are, on average, 15.7 % higher than the national average; the national average fluctuates in the range of 7.9 percentage points, while in Zemgale region it is in the range of 15.7 percentage points. In general, one can conclude that the indicators of projects implemented by agricultural holdings in Zemgale region considerably exceed the averages for the agricultural industry, and the amount of investment subsidies received by farms in Zemgale region affect their solvency and value added generated.

## Conclusions and recommendations

- 1) To stimulate the development of small agricultural holdings, the Rural Development Support Department of the Ministry of Agriculture of the Republic of Latvia, when working on the new Rural Development Plan for 2021-2027, has to continue designing additional measures to support the small agricultural holdings and young farmers also under the Rural Development Plan 2014-2020, thereby promoting investment in the small agricultural holdings.
- 2) To limit the distribution of European Union EAFRD funding among the largest farms of Zemgale region, the Minister of Agriculture of the Republic of Latvia has to set a lower amount of support

to be available for one applicant, especially under the measure "Investment in tangible assets" (from EUR 2 mln. to EUR 1.2 mln.), in order to increase the availability funding for small farms.

- 3) To avoid the risk of insolvency by support applicants in the agricultural industry, the Minister of Agriculture of the Republic of Latvia has to expand the range of eligibility criteria for investment support project submitters by a farm financial dependence indicator that excludes from participation the enterprises that are highly financially dependent, thereby contributing to farm financial independence.

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