### ASSESSMENT OF THE INTENSITY AND ACTIVITY OF USE OF EU FUNDS IN EMGALE EGION

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**Abstract.** The research aim is to examine and assess the intensity and effectiveness of investment from the EU Structural Funds and the Cohesion Fund in Latvia as a whole as well as in Zemgale region municipalities.

The research compared and assessed the intensity of investment of EU funds per capita in Latvia and CEE countries in the period 2007-2016 and identified the effect on GDP growth. To assess the attraction of EU structural and cohesion funding in Latvia, the following specific research tasks were set: to summarise and systemise information on changes in the absorption of EU funding in Latvia, including that for the development of Zemgale region municipalities in the period 2007-2015, to analyse the amount and intensity of absorption of EU structural and cohesion funding; to perform a quantitative assessment of the effect of EU funding on the development of Zemgale region municipalities in the period 2007-2015; to analyse the results of EU co-funded projects implemented in Zemgale region and the intensity of absorption of EU funding by priority and by activity as well as if measured per capita.

Key words: EU funds, municipalities, CEE, Latvia, Zemgale region.

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

### Introduction

The most important regional development problems that are typical of the whole territory of the country relate to socio-economic disparities across the regions, including an explicitly monocentric and capital city-oriented pattern of residence and economic activity and the insufficient competitiveness of Latvia's regions and development centres (Regionalas politikas ..., 2013).

According to the 2016 Report on the Implementation and Achievement of the Horizontal Priority "Macroeconomic Stability" in 2015 by the Ministry of Finance of the Republic of Latvia, in recent years Riga as the capital city attracted the greatest amount of funding from the EU Funds - in 2015, the proportion of EU funding disbursed in Riga statistical region was approximately 32 % of the total, while the disparities between Riga and the other regions continued increasing in 2015 (Zinojums par horizontalas... , 2016, p.14). This situation prompted the authors to do an in-depth research study within Zemgale region.

The research **aim** is to examine and assess the intensity and effectiveness of investment from the EU Structural Funds and Cohesion Fund in Latvia as a whole as well as in Zemgale region municipalities.

To assess the attraction of EU structural and cohesion funding in Latvia, the following specific research **tasks** were set:

- to compare the intensity of attraction of EU funding in Latvia and CEE countries in the period 2007-2016 and to identify the effect on GDP growth;
- to summarise and systemise information on the amount and intensity of absorption of EU structural and cohesion funding for the development of Zemgale region municipalities in the period 2007-2015 and to describe the enhancement aspects of attraction of EU funding.

**Research methods**: document and project analysis, comparative analysis, statistical analysis and grouping. Municipalities were grouped according to a classification of municipalities developed by the Ministry of Environmental Protection and Regional Development (MoEPRD).

Data on 22 municipalities and two cities of Zemgale region were summarised, grouped and assessed to perform a quantitative analysis. The municipalities were divided into seven groups (Table 1). The calculations did not take into account the projects that were implemented in cooperation with Vidzeme or Kurzeme municipalities as well as the capital city of Riga:

four ERDF projects, eight ESF projects and four CF projects.

The research used the following information sources: data of the management information system (MIS) for EU funds, data provided by the Ministry of Finance and the Ministry of Environmental Protection and Regional Development of the Republic of Latvia, data on control of EU funding use that are summarised and structured in databases available on websites, data provided by the Central Statistical Bureau of Latvia, research findings and papers by national scientists, research papers

Jelgava, LLU ESAF, 27-28 April 2017, pp. 95-101 researchers from the EU Member States, Eurostat data etc.

The management information system for EU funds collects information on the amounts of funding received from the EU Funds (the European Social Fund (ESF), the European Regional Development Fund (ERDF) and the Cohesion Fund (CF)), thereby providing a unified data source that records and controls EU cofunded projects and allows analysing their effects on regional development broken down by municipality and by region.

 $$\operatorname{\sf Table}\ 1$$  Zemgale region municipalities grouped for an analysis of the use of EU funds

Group of municipalities	Zemgale region cities and municipalities	Group No.
Regional level	Zemgale	1
Development centres of national significance	Jelgava, Jekabpils	2
Municipalities (with a development centre of regional significance) with a population of more than 10000	Dobele municipality	3
Municipalities (with a development centre of national significance) with a population of more than 5000	Aizkraukle municipality, Bauska municipality	4
Municipalities (without a development centre of regional significance) with a population of more than 10000	Jelgava municipality	5
Municipalities (without a development centre of regional significance) with a population of more than 5000	Municipalities of Auce, Iecava, Jaunjelgava, Jekabpils, Koknese, Krustpils, Ozolnieki, Plavinas and Vecumnieki	6
Municipalities (without a development centre of regional significance) with a population of less than 5000	Municipalities of Akniste, Nereta, Rundale, Sala, Skriveri, Tervete and Viesite	7

### Source: authors' construction based on the classification of the MoEPRD

The assessment was performed both in absolute numbers (the total amount of support disbursed in a territory) and in relative numbers (per capita for a particular territory) for the period 2007-2015, as well as the distribution of EU funding was analysed by group of municipalities.

### Research results and discussion Assessment of the results of implementation of EU co-funded projects

The effective use of EU funding is impossible without performing regular assessments of the absorption of the funding in terms of quality and of the effects on the national economy and

regional development. A number of leading researchers of the EU Member States pointed to actively opportunities to stimulate entrepreneurship in regions, shape an innovative environment, reduce regional disparities and use the EU Funds as instruments to achieve the mentioned objectives (Grinevica L., Rivza B., Rivza P., 2016; Jankova L., 2013; Bulderberga Z., 2014; Jakusonoka I., 2007; Rivza B., Kruzmetra M., Zaluksne V. (2016) et al.). Higher effectiveness of Cohesion Policy investment is possible in the Member States that are implementing financial discipline, which allows concentrating Cohesion Policy instruments on

eliminating the disparities in development (Jankava L., Jurgelane I., Auzina A., 2016).

The aims of preparing and implementing public projects are the achievement of sustainable development, rural or regional development, reducing poverty, ensuring equal opportunities, and other strategies and goals of countries (V.Alekneviciene, J.Baranauskiene, 2014).

Research studies on the effective use of EU funds conducted in various EU Member States have yielded diverse results, which were influenced by a number of aspects. A research investigation done by Lithuanian scientists allowed concluding that "whereas from the point of permanent job cost, the most inefficient investment was made into the development of the production sector. In the short-term, (all jobs) investments made in Lithuania into human capital and the development of physical infrastructure turned out to be the most efficient" (A.Aleksandravicius, A.Raupeliene, 2014).

Table 2

EU funds attracted by the CEE countries in the period 2007-2016

		T T	
CEE countries	EU funds per capita (EUR)	EU funds as a % of GDP	
Bulgaria	927	15.1	
Croatia	305	3.0	
Czech Republic	2496	15.9	
Estonia	2592	16.6	
Hungary	2529	22.9	
Latvia	2298	18.6	
Lithuania	2320	18.2	
Poland	1768	15.7	
Romania	960	10.8	
Slovakia	2144	14.9	
Slovenia	1988	10.6	
CEE average	1848	14.8	
Latvia +/- against the CEE average	+ 450	+ 3.8	

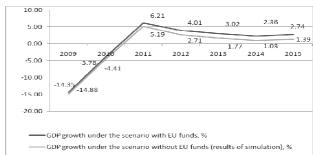
Source: authors' construction based on Zinojums par horizontalas..., 2016

The amount of funding from the European Social Fund, the European Regional Development Fund and the Cohesion Fund reached EUR 4.5

Jelgava, LLU ESAF, 27-28 April 2017, pp. 95-101 billion in Latvia in the period 2007-2013, while in the programming period 2014-2020 it could reach EUR 4.418 billion.

In terms of attraction of EU funding in the period 2007-2016, Latvia ranked second behind Hungary among the Central and East European countries; if measured as a % of GDP, the amount of EU funds comprised 18.6 %, which was 3.8 % more than the average in the CEE countries (Table 2). The attraction of EU structural funding (from the ERDF and the ESF) and EU cohesion funding in the CEE countries if measured per capita totalled EUR 1848; in Latvia this figure was higher by EUR 450 and reached EUR 2298 per capita.

The effects of EU funds were widely analysed in conjunction with entrepreneurial activity assessments at national level and GDP growth broken down by region. After assessing the effect of EU structural and cohesion funds on economic growth in Latvia, the Ministry of Finance of the Republic of Latvia concluded that in general in the period 2011-2015, the contribution of the EU funds to GDP growth was, on average, 1.3 percentage points (Zinojums par horizontalas..., 2016).



Source: authors' construction based on Zinojums par horizontalas...., 2016

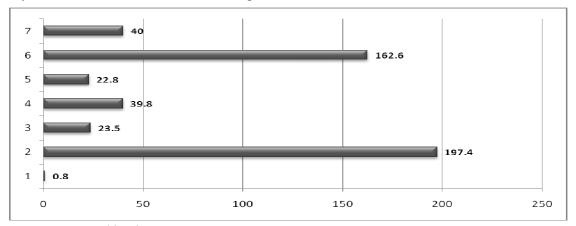
Fig. 1. Effects of EU structural and cohesion funds on GDP growth in Latvia in the period 2009-2015

The total budget of 855 projects, examined in the research, that were implemented in Zemgale region municipalities was equal to EUR 815.3 million; the EU co-funding rate was, on average, 60 % of the total project budget and the EU co-funding per capita reached EUR 1693. However, the amounts of attracted EU funding considerably varied across various groups of municipalities.

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Two development centres of national significance (Jelgava and Jekabpils - the second group of municipalities) accumulated EUR 197.4 million (Figure 2) or 40.5 % of the total EU co-funding in

the region, while the remaining 20 municipalities (3<sup>rd</sup>-7<sup>th</sup> groups) attracted EUR 289.6 million or 59.5 %.



- Regional level
- 2 Development centres of national significance
- Municipalities (with a development centre of regional significance) with a population of 3 more than 10000
- Municipalities (with a development centre of national significance) with a population of 4 more than 5000
- Municipalities (without a development centre of regional significance) with a population of 5 more than 10000
- Municipalities (without a development centre of regional significance) with a population of 6 more than 5000
- Municipalities (without a development centre of regional significance) with a population of 7 less than 5000

Source: authors' calculations based on EU funds..., 2015, esfinanses.lv.

Fig. 2. EU co-funding disbursed in the groups of municipalities in Zemgale region in the period 2007-015, mln. EUR

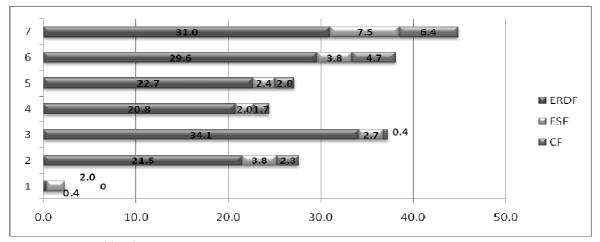
A report by the MoEPRD "Assessment of the Effect of EU Funds on the Development of Territories of Latvia in the Period 2007-2013" has noted that the recipients of EU co-funding pointed to various activities that are necessary in order to effectively attract various investors. These activities have to contribute to the following fields (ordered by relevance): repairs and construction of motor roads; construction of engineering networks, structures and communications; construction of buildings; establishment of business incubators, technological and industrial parks parks; construction and repairs of internal roads within facilities and around the facilities; enhancement of building infrastructure fondu..., 2016).

The number of accepted projects per 10000 capita was calculated to identify the activity of attraction of EU co-funding (Figure 3). The group of municipalities that had a development centre of regional significance and a population of more than 10000 prevailed in submitting quality and acceptable projects (35.9 projects), which was followed by the group of municipalities that had no development centre of regional significance and had a population of less than 5000 (31 projects) and the group of municipalities that had no development centre of regional significance and had a population of more than 5000 (29.6 projects). However, the projects co-funded by the ESF and the CF were most actively implemented by the 7th group of municipalities that had no development centre of regional significance and had a population of less than 5000 (Figure 3). The intensity of attraction of EU co-funding is best characterised by investment per capita and the total budget of implemented

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projects, including the amount of funding from the EU Funds (the ERDF, the ESF and the CF) invested in achieving various socio-economic performance indicators.



- 1 Regional level
- 2 Development centres of national significance
- $^{3}$  Municipalities (with a development centre of regional significance) with a population of more than 10000
- 4 Municipalities (with a development centre of national significance) with a population of more than 5000
- $_{5}$  Municipalities (without a development centre of regional significance) with a population of more than  $_{1000}$
- Municipalities (without a development centre of regional significance) with a population of more than 5000
- 7 Municipalities (without a development centre of regional significance) with a population of less than 5000

Source: authors' calculations based on EU funds..., 2015, esfinanses.lv.

Fig. 3. Number of EU co-funded projects per 10000 capita in Zemgale region municipalities in the period 2007-2015

The authors' research allowed finding that 258 or 30 % of the 855 projects implemented in Zemgale region were implemented under the programme "Entrepreneurship and Innovation", 110 – under the programme "Human Resources

and Employment", while 487 – under the programme "Infrastructure and Services".

The intensity of attraction of EU co-funding per capita for the groups of municipalities is presented in Table 3.

Table 3

## Intensity of implementation of EU co-funded projects per capita in the groups of municipalities of Zemgale region, EUR

	ERDF co-funded projects		ESF co-funded projects		CF co-funded projects	
Groups of municipalities	total project budget per capita	incl. the ERDF	total project budget per capita	incl. the ESF	total project budget per capita	incl. the CF
1	25.76	21.85	10.99	9.36	0	0
2	2411.40	1681.29	106.49	52.47	1345.0	548.03
3	1706.45	821.41	14.29	12.68	309.0	209.86
4	1163.99	769.98	21.61	19.75	594.0	343.69
5	436.13	269.26	17.27	16.06	836.0	623.86
6	1198.93	782.28	19.15	16.45	3012.0	1660.30
7	1737.77	1179.76	45.08	42.88	454.0	273.15

Source: authors' calculations based on EU funds..., 2015, esfinanses.lv.

A comparison of the per-capita amounts of funding from the EU Funds (the ERDF, the ESF

and the CF) invested in projects in Zemgale region municipalities with the CEE average, which

was EUR 1848 per capita in the period 2007-2015, shows that this indicator was 23 % higher in the development centres of national significance (Jelgava and Jekabpils), while in the group of municipalities that had no development centre of regional significance and had a population of more than 5000 it was 33 % higher; the other groups of municipalities considerably lagged behind (Table 4).

The targets of the horizontal priority "Balanced Territorial Development" co-funded by the EU Funds can be achieved by taking into account the potential and ability of municipalities to create a higher value-added and a positive effect in the future. To promote the contribution of the EU Funds to exports in the programming period 2014-2020, the operational programme Innovation" "Entrepreneurship and was supplemented with two sub-activities (subactivity 2.3.1.1.1 "Access to International Trade Markets - External Marketing" and sub-activity 2.3.1.1.2 "Access to International Trade Markets Strengthening the International Competitiveness of Industries") as well as activity 2.3.2.3 "Cluster Programme" whose purpose is to facilitate access to international markets and promote cooperation among earlier unrelated businessmen and research, educational and other institutions, thereby contributing the competitiveness of industries and businessmen as well as exports (Zinojums par horizontalas..., 2016).

Recipients of EU co-funding submit reports in accordance with Cabinet regulation No. 1 238 "Procedures for the Control and Assessment of Introduction of the European Union Funds"; the timely summarisation and examination of the reports allows analysing the results achieved for the entire current programming period and implementing the principles of distribution of funding, which directly contribute to achieving the targets set by the horizontal priorities and allow measuring returns on investment and,

Jelgava, LLU ESAF, 27-28 April 2017, pp. 95-101 subsequently, direct the investments to projects with higher returns.

Table 4

# Intensity of attraction of EU funds (per capita) in Zemgale region in the period 2007-2015 compared with the CEE average

Groups of municipali ties	total EU co- funding, mln. EUR	per capita, EUR	as a % of the CEE average
1	0.8	31	1.7
2	197.4	2282	123.5
3	23.5	1044	56.5
4	39.8	1133	61.3
5	22.8	909	49.2
6	162.6	2459	133.1
7	40	1496	81.0

Source: authors' calculations based on esfinanses.lv.

#### **Conclusions**

- 1) In terms of attraction of EU funding in the period 2007-2016, Latvia ranked second behind Hungary among the Central and East European countries; if measured as a % of GDP, the amount of EU funds comprised 18.6 %, which was 3.8 % more than the average in the CEE countries. The attraction of EU structural funding (from the ERDF and the ESF) and EU cohesion funding in the CEE countries if measured per capita totalled EUR 1848; in Latvia this figure was higher by EUR 450 and reached EUR 2298 per capita.
- 2) A comparison of the per-capita amounts of funding from the EU Funds (the ERDF, the ESF and the CF) invested in projects in Zemgale region municipalities in the period 2007-2015 with the CEE average shows that this indicator was 23 % higher in the development centres of national significance (Jelgava and Jekabpils), while in the group of municipalities that had no development centre of regional significance and had a population of more than 5000 it was 33 % higher; the other groups of municipalities considerably lagged behind.
- 3) The timely summarisation and examination of the reports allows analysing the results

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achieved for the entire current programming period and implementing the principles of distribution of funding, which directly contribute to achieving the targets set by the horizontal priorities and allow measuring returns on investment and, subsequently, direct the investments to projects with higher returns.

Jelgava, LLU ESAF, 27-28 April 2017, pp. 95-101 Transformation, Smart Growth, Governance and Legal Framework for the State and Society for Sustainable Development - a New Approach to the Creation of a Sustainable Learning Community (EKOSOC-LV)" – sub-project 5.2.3 "Rural and Regional Development Processes and Opportunities in Latvia in the Context of Knowledge Economy".

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