THE IMPACT OF EU STRUCTURAL FUND SUPPORT AND PROBLEMS OF ITS ABSORPTION

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Abstract. Targeted allocation of EU support in Lithuania can help resolving a number of problems and achieving significant results in a variety of areas. However, rush to absorb support may lead to a little, zero or even negative impact on national economy. In addition, EU support opportunities may distort investment motivation. This paper deals with issues related to the impact of EU support and problems of its absorption. The impact of EU support on the national economy has been established in three areas: attraction of foreign direct investment state investments into capital formation, and experience of companies, which are EU support beneficiaries. The paper proposes using regression analysis in search and evaluation of relations while obtaining more information about programmes, priorities and the impact of structural support on different indicators. In addition, it focuses on ascertaining the effectiveness of governmental and company spending. Furthermore, as companies – EU support beneficiaries – are engaged in different economic activities, their experience cannot be ascertained from statistical data; consequently, findings of an expert survey are presented to demonstrate the experience acquired by business companies as well as problems they face. Limitation of research was a short period of time to evaluate (only four years of the current funding period).

Keywords: European Union, structural funds, support absorption problems, foreign direct investment, gross fixed capital formation.

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1. Introduction

As a number of problems can be resolved with the help of EU Structural Funds, this financial instrument maintains its relevance. It aims to reduce economic and social disparities among EU member states providing financial support and coordinating regional policy. In the current programming period, Lithuania is allocated more than LTL 23 billion from EU structural assistance. The greatest part of support has been allocated to measures of the Operational Programme ‘Economic Growth’ designed to increase
competitiveness of businesses, modernise production and implement other economy boosting projects. Targeted allocation of EU Structural Funds in Lithuania can help achieving significant results in many areas. However, rush in absorbing this support may result in a wide range of impacts – from little to none or even negative – on national economy. Besides, implementation of more important projects or achievement of more important aims may be delayed. Considering the large scope of EU financial assistance, it has a significant impact on decisions made by both the public and private sectors.

In terms of support from EU Structural Funds, Lithuania has to address a number of relevant questions, including the evaluation of support impact as well as resolve problems that slow down absorption of support. As the current programming period will be followed by the one starting in 2014, improvements could be made aiming to use support more effectively and achieve better results.

The aim of the article is to establish the impact of EU support on economy in three areas: attraction of foreign direct investment, state investments into capital formation, and experience of companies.

To achieve this aim, the analysis was undertaken to establish the impact of the support on different indicators (i.e. foreign direct investment and gross fixed capital formation by the government) during 2008–2012 as well as to ascertain experience accumulated and problems faced by businesses in the process of implementation of projects supported by EU Structural Funds. The following methods were used: review of scientific methodological literature; analysis of data; regression studies; expert survey; and graphical representation of data.

2. Theoretical aspects pertaining to the impact of EU support on national economy

Investigation of the impact of EU Structural Funds on the economic growth and convergence process is a widely researched topic. Katsaitis and Doulos (2009) note that since the purpose of Structural Funds is to stimulate growth, there is an interest to investigate empirically how effective these funds have been in achieving their objective. Bodenstein and Kemmerling (2012: 3) emphasise that it is still disputable whether Structural Funds have really led to a higher regional convergence, or a mechanism of redistribution. According to Varga and Veld (2009), economic theory predicts unambiguous benefits from investments in infrastructure and human capital and there is empirical evidence supporting this fact. However, the literature review of evaluation studies on large EU transfers in the past does not lead to clear-cut results. According to Mohl and Hagen (2010) as well as Varga and Veld (2009), the empirical evidence has produced mixed results. Some authors substantiate a positive impact of Structural Funds on economy (Puigcerver-Penalver 2007; Eggert et al. 2007; Cappelen et al. 2003) while others argue it is rather weak (Percoco 2005; Esposti, Bussoletti 2008) or nonexistent (Dall’erba,
Le Gallo 2008; Garcia-Mila, McGuire 2001). According to Perez et al. (2009), some studies found that in terms of the poorest countries, the EU integration seems to have benefited mainly their richest rather than poorest regions. This statement uses the division into regions from the perspective of EU support allocation.

In their article, Mohl and Hagen (2010) note that there are many reasons for such mixed results, including the low quality of data on Structural Funds at a regional level, a number of methodological problems and a time lag of up to five years before manifestation of growth impact. Katsaitis and Doulos (2009) emphasize such reasons as wide difference in perspectives, methodologies, sample selections and analytical tools. Dall’erba and Le Gallo (2008) also state that the significance of the EU support in determining growth rates can be observed in the long run. Meanwhile Crescenzi (2009) points out that it is conceptually hard to extract pure impact of structural expenditure from the background of all other domestic and external shocks that affect the economy at the same time. Some quite interesting and different observations were found in articles by Katsaitis and Doulos (2009), Šumpikova et al. (2007), Martin (2010) and Georgescu (2008). Katsaitis and Doulos (2009) note that even though Structural Funds are expected to stimulate growth and investment (they are required to be invested), these funds may be invested in certain other than growth-promoting projects and even drain human capital from other more productive activities. Šumpikova et al. (2007) emphasize that countries have a limited capacity to absorb external investment support effectively and efficiently. Martin (2010) defines absorption capacity as the extent to which a member state is able to effectively and efficiently spend the financial resources allocated from the EU funds. According to Šumpikova et al. (2007), this capacity is necessary for making a maximum contribution to economic and social cohesion. The absorption capacity on the demand side means the actual ability by project applicants to generate acceptable projects. The supply side of the absorption capacity can be determined using three main factors: macroeconomic absorption capacity (defined and measured in terms of GDP with the transfer of EU funds is restricted to a maximum of 4% of the respective country’s GDP), financial absorption capacity (the ability to co-finance EU supported programmes and projects, to plan and guarantee these national contributions in multi-annual budgets, and to collect these contributions from partners involved in various programmes or projects), administrative capacity (the ability and skills of central, regional and local authorities to prepare programmes and projects in due time, to take required decisions, to arrange coordination among partners, to cope with administrative and reporting requirements, to finance and properly supervise implementation, avoiding irregularities). According to Georgescu (2008), the most disadvantaged regions are also the ones experiencing the greatest difficulties in absorption of funds; however, theoretically and practically these are the regions in the greatest need, of financial support for economic restructuring.

In their articles, Katsaitis and Doulos (2009) as well as Bahr (2008) emphasize that the effectiveness of regional policy crucially depends on the institutional environment, in which it is implemented (the national institutional quality). According to authors, effectiveness of Structural Funds depends on their investment: to bring the intended
convergence process, the Funds have to be invested in a way that stimulates growth. Although Structural Funds have to be invested, there is a reason to doubt, whether they are used in a way that really promotes growth. Firstly, often the Funds have to be invested in pre-specified projects that are hardly always growth-promoting, such as environmental projects. Secondly, while the co-funding requirement ensures that resources are actually invested, it may cause crowding out in public funds from other implemented projects. It is not clear in advance whether projects that qualify for EU-funding have a higher growth promoting capability than other public projects.

3. Comparison of countries by EU support

In 2007, the average GDP per capita of EU-27 was EUR 25 000. Positive change was observed in the year 2011 when the average GDP per capita of EU-27 increased up to EUR 25 200, thus exceeding the level of 2007. During the period 2007–2011, there were no significant positive or negative deviations of national GDPs per capita from the average of EU-27.

New EU members (which joined the EU during the enlargement in 2004 and 2007) and three old EU members (from EU-15) – Spain, Greece and Portugal — received the greatest portion of support per capita. The GDP per capita in the aforementioned three old member states is lower than the average of EU-27 (Fig. 1). Until 1 January 2013, the greatest amount of EU support per capita was received by Hungary while the least amount of funding was paid to Denmark. Lithuania occupies the 4th position. On 1 January 2013, the greatest amount of funds was allocated to Ireland (52.8%). Lithuania occupied the second position (52.1%) while Portugal remained third (51.4%). The least amount of support (per country) was allocated to Romania (12.3%), Italy (22.7%) and Bulgaria (26.7%). The situation with support absorption in the current programming period in other countries can be seen in Fig. 1.

However, the absorption rate of EU funds says little about the efficiency and expediency of absorption. Some quickly absorbed support may bring little or zero benefit for the national economy, or even affect it negatively. As projects have to be co-financed by national funds, money may be used for other than priority aims while implementation of more important projects or aims may be postponed.

4. The structure of the study

A number of authors analysed the impact of structural support on foreign direct investments. Breuss and Egger (2010) focus on the impact of redistributed EU funds (resulting from EU enlargements) on foreign direct investment. They use a logistic bilateral foreign direct investment (FDI) regression model. According to the authors, the redistribution of funds (following enlargements) makes the accession countries more attractive for FDI. This impact is analysed in many countries. Katsaitis and Doulos (2009) examine
the impact of Structural Funds on FDI inflows in EU-15 states. They use econometric analysis, which is based on the panel model. The authors emphasise that Structural Funds are supposed to stimulate growth and accelerate improvement of infrastructure and institutional environment of the benefiting state; based on this, a hypothesis was made and substantiated that the impact of Structural Funds on FDI is positive; however, it was observed that the impact on FDI depends on the institutional quality of the host country. This research involves many countries and indexes.

Analysis of scientific methodological literature resulted in an observation that little attention is given to small and specific countries as only five countries of the EU – Lithuania, Latvia, Estonia, Denmark and Slovenia – remain undivided into regions from the perspective of EU support allocation. According to Rivža et al. (2010), differently than in other EU member states, each of these countries receives financing as a country rather than a separate region. Authors usually analyse and present the impact of the EU support from the perspective of regions (Becker et al. 2010, 2012; Dall’erba and Le Gallo 2007; Bachtler and McMaster 2007; Lolos 2009; etc.). Such analysis involves especially complex methods, many regions, countries and indexes. Some authors (Rivža et
al. 2010; Meženiece and Rivža 2011) analyse examples of good practice in efficient allocation of EU structural support of some EU countries for the benefit of countries which allocate support less efficiently. Furthermore, it was observed that no attention was given to experience of national companies. The research presented in this paper was delivered on three levels (Fig. 2).

![Diagram of EU support links]

**Fig. 2.** Analyses of EU support links (Source: created by the authors)

Firstly, the impact of the ability of Lithuania to attract foreign direct investments was analysed. Secondly, the analysis went into greater detail, namely, to the level of a country and more specifically – the impact of EU support on government investments in formation of gross fixed capital. Thirdly, the research focused on the level of companies and even more specifically – experience of companies in relation to absorption of EU support and related problems. The research used different quantitative methods. The first part of the presented analysis was made using quantitative research method – determining correlation between certain variables to get more information on the impact of EU support on different investments on the country level. Correlation was defined as the relationship between two rates (two features) (Pabedinskaitė 2008). The value of the correlation coefficient demonstrates the strength of the relationship between two analysed features\(^1\).

Primarily, the correlation analysis was made to find the dependence of foreign direct investments on money paid for projects attributed to different priorities of the Operational Programme ‘Economic Growth’. According to Breuss *et al.* (2010), an increase in national structural expenditures leads to increase in FDI. This correlation

\(^1\) The formula for finding correlation coefficient:

\[
\tau = \frac{1}{n-1} \sum (x_i - \bar{x})(y_i - \bar{y}) \overline{S_x S_y},
\]

where: \(\tau, \bar{x}, \bar{y}\) – averages of relative features; \(\overline{S_x}, \overline{S_y}\) – square average of relative features; \(n\) – number of observations (Pabedinskaitė 2008).
analysis determines the presence of a stochastic relationship between these indicators in Lithuania. Next, correlation analysis was made to find the dependence of the government-delivered formation of gross fixed capital on money paid for projects, which are attributed to different priority measures of the Operational Programme ‘Economic Growth’. This correlation analysis determines the presence of a stochastic relationship between these indicators.

The latest data on foreign direct investments was collected from the website of the Statistics Lithuania (2012). Data regarding the formation of the gross fixed capital by the business sector was collected from the website of Eurostat (European Commission 2012). Data on money paid to projects attributed to different priorities of the Operational Programme ‘Economic Growth’ (OP2) was collected from the official website of Lithuanian EU support for the period of four years (2008–2011). This paper presents only those dependencies that were found.

Limitation of research, made using the correlation method, was a short period of time to evaluate. Covering a longer time span, the research could reveal different relationships. The time period used for measuring could be even longer than the current programming period. As Varga and Veld (2009) noted, the past experience in previous programming periods has demonstrated considerable delays in payments, typically extending for up to two additional years.

Another quantitative research method – expert survey – was used to evaluate EU support-related experience accumulated by companies. This method was selected as neither data on the absorption of EU Structural Funds nor changes in indicators do not reflect the impact on the level of companies or relevant challenges particular to Lithuania. In comparison to the entire number of companies operating in Lithuania, only a small portion benefit from the EU support. Besides, the latter engage in a wide variety on economic activities. Consequently, quantitative research methods other than expert survey were unsuitable in this particular case.

Kardelis (2007) defines the expert survey as a specific type of survey based on interviews of specially selected group of people with a particular knowledge area. This method allows formulating scientific concepts and ensures scientific objectivity. Surveys can be used once or performed repeatedly. The expert survey is often carried out using questionnaires or interviews. According to Dorussen et al. (2005), the disadvantage of the method is that the obtained information is subjective and related to personal opinion. This is especially true in the areas of values, feelings and outlook. This method is based on the principle that experts analyse a problem logically, by quantitatively assessing and formally processing the data. In order to undertake this type of survey, expert selection principles have to be formulated (Kardelis 2007).
5. Relationships between different indicators

The impact of Structural Fund on foreign direct investments and government investment in gross fixed capital formation were analysed through regression studies. Payments for this particular analysis were selected from the Operational Program ‘Economic Growth’ (OP2) as it receives the lion’s share of the support. The year 2007 was not covered by the research as it was the first year of the programming period and first calls for applications were announced only in 2008. The research findings revealed cases with effective use of the support and an evident impact. As all projects selected for EU support are also co-financed by the government, company and other sources, it may be assumed that this part of funds was used effectively as well.

The first hypothesis suggests that money paid to a project related to R&D for competitiveness and growth of the economy (Priority 1 of the Operational Program ‘Economic Growth’) attracts more foreign direct investments. Such projects focus on new opportunities, development of new products, innovations, creation of products and systems (involving IT, medicine, various fields of engineering, etc.). The regression graph is presented in Figure 1 of Appendix A. Regression equation: \( \hat{y} = 31404776421,10 + 27,93321576 \times x \). It can be stated that LTL 1 million paid to projects of the Priority OP2-1 attracts approximately LTL 28 million of FDI. The obtained results confirmed the hypothesis. Findings are presented in Table 1.

Table 1. The correlation between FDI and Priority OP2-1(Source: calculated by the authors)

| Years | FDI (millions of LTL) | Priority OP2-1
<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Money paid to projects (LTL)</td>
</tr>
<tr>
<td>2008</td>
<td>31 733</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>31 787</td>
<td>34 125 429</td>
</tr>
<tr>
<td>2010</td>
<td>34 635</td>
<td>105 359 504</td>
</tr>
<tr>
<td>2011</td>
<td>38 081</td>
<td>240 598 562</td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td>0.990383392</td>
<td></td>
</tr>
<tr>
<td>T statistic</td>
<td>10.1236942</td>
<td></td>
</tr>
<tr>
<td>T table</td>
<td>4.30265273</td>
<td></td>
</tr>
<tr>
<td>a0</td>
<td>31404776421,10</td>
<td></td>
</tr>
<tr>
<td>a1</td>
<td>27,93321576</td>
<td></td>
</tr>
<tr>
<td>F statistic</td>
<td>102,4891843</td>
<td></td>
</tr>
<tr>
<td>F table</td>
<td>18,51282051</td>
<td></td>
</tr>
</tbody>
</table>
The correlation coefficient is approx. 0.99, thus FDI dependence on the funds paid to projects of the Priority OP2-1 is very strong and direct\(^2\). The second hypothesis suggests that money paid to the projects (during the implementation stage) related to basic economic infrastructure (Priority 4 of OP2) attract more foreign direct investments. These projects focus on modernisation and development of district heating or electricity systems, natural gas transmission, improvement and modernisation of different types of transportation networks (road, rail and marine). The regression graph is presented in Figure 2 of Appendix A. The regression equation is \( \hat{y} = 32298574364.34 + 108,67674515 \times x \). It can be stated that LTL 1 million paid to projects of the Priority OP2-4 attracts approx. LTL 109 million of FDI. The obtained results confirmed the hypothesis. Findings are presented in Table 2. The correlation coefficient is approx. 0.96, thus FDI dependence on the funds paid to the projects in implementation stage of the Priority OP2-4 is very strong and direct.

**Table 2.** Correlation between FDI and Priorities OP2-4 and OP2-5 (Source: calculated by the authors)

<table>
<thead>
<tr>
<th>Years</th>
<th>FDI (millions of LTL)</th>
<th>Priority OP2-4</th>
<th>Priority OP2-5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Money paid to projects in implementation stage (LTL)</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>31 733</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>31 787</td>
<td>0</td>
<td>25 542 759</td>
</tr>
<tr>
<td>2010</td>
<td>34 635</td>
<td>9 527 094</td>
<td>93 916 067</td>
</tr>
<tr>
<td>2011</td>
<td>38 081</td>
<td>55 268 392</td>
<td>294 624 312</td>
</tr>
<tr>
<td></td>
<td>Correlation coefficient</td>
<td>0.956121303</td>
<td>0.982031777</td>
</tr>
<tr>
<td></td>
<td>T statistic</td>
<td>4.61535103</td>
<td>7.359234887</td>
</tr>
<tr>
<td></td>
<td>T table</td>
<td>4.30265273</td>
<td>4.30265273</td>
</tr>
<tr>
<td>a0</td>
<td>32298574364.34</td>
<td>31770071240.51</td>
<td></td>
</tr>
<tr>
<td>a1</td>
<td>108,67674515</td>
<td>22.11095839</td>
<td></td>
</tr>
<tr>
<td>F statistic</td>
<td>21.30131812</td>
<td>54.15833812</td>
<td></td>
</tr>
<tr>
<td>F table</td>
<td>18.51282051</td>
<td>18.51282051</td>
<td></td>
</tr>
</tbody>
</table>

The third hypothesis suggests that money paid to the projects (in implementation stage) related to the Priority on the development of Trans-European transport networks (Priority 5 of OP2) attract more foreign direct investments. The Priority on the development of Trans-European transport networks covers all forms of Trans-European transportation, i.e. roads, rails, marine and air. These projects also construct bypass

\[ t_{\text{stat}} = \left| r \sqrt{\frac{n-2}{1-r^2}} \right| \]  

The essential condition for the stochastic dependence is: \( t_{\text{stat}} > t_{\text{crit}}(\alpha, n-2) \), where \( \alpha = 0.05 \) (Pabedinskaitė 2008).

\(^2\) The closer correlation coefficient gets to 1 or -1 the stronger it is. If \( r = 0 \), the features are independent of each other; if \( r < 0 \), the dependence is inverted; if \( r > 0 \), the dependence is direct. To check the importance of the correlation coefficient, \( t_{\text{stat}} \) is calculated:
roads and undertake preparatory works for establishment of the public logistic centre. The regression graph is presented in Figure 3 of Appendix A. The regression equation: \( \hat{y} = 31770071240.51 + 22,11095839 \times x \). It can be stated that LTL 1 million paid to projects of the Priority OP2-5 attracts approximately LTL 22 million of FDI. The obtained results confirmed the hypothesis. Findings are presented in Table 2. The correlation coefficient is approx. 0.98, thus FDI dependence on money paid to projects in implementation stage of the Priority OP2-5 is very strong and direct.

Changes achieved in Lithuania with the help of projects attributed to these three priorities resulted in increased attractiveness of the country to foreign investors. It may be assumed that in these cases support and co-financing were used effectively. Increased EU support for these types of projects might attract more FDI in the future.

**Table 3.** Correlation between GFCF by the government and the measure OP2-5.1 (Source: calculated by the authors)

| Years | GFCF by the government (millions of LTL) | Measure OP2-5.1 | | | |
|-------|-----------------------------------------|----------------|---|---|
|       |                                        | Money paid to projects (LTL) | | | |
| 2008  | 5 518                                   | 31 908 373      |   |   |
| 2009  | 3 580                                   | 319 232 284     |   |   |
| 2010  | 4 356                                   | 253 074 624     |   |   |
| 2011  | 4 659                                   | 131 655 084     |   |   |
|       | Correlation coefficient                  | -0.969205172    |   |   |
|       | T statistic                              | 5.566040293     |   |   |
|       | T table                                  | 4.30265273      |   |   |
|       | a0                                       | 5646512751.59   |   |   |
|       | a1                                       | -6.07858757     |   |   |
|       | F statistic                              | 30.98080454     |   |   |
|       | F table                                  | 18.51282051     |   |   |

The further impact on capital investments made by the government was analysed. The hypothesis suggests that funds given to projects (in implementation stage) specifically related to the development of Trans-European roads (Measure 1 of the Priority 5 of OP2) decrease governmental investments into GFCF (gross fixed capital formation). These projects aim for improvement of Trans-European road parameters and increase of their throughput. The regression graph is presented in Appendix B. The regression equation: \( \hat{y} = 5646512751.59 - 6,07858757 \times x \). It can be stated that LTL 1 million paid to projects attributed to the Measure OP2-5.1 results in LTL 6 million of savings in governmental funds. The obtained results confirm the hypothesis. Findings are presented in Table 3. The correlation coefficient is approx. -0.97, consequently, the dependence of GFCF (by the government) on money paid to projects in implementation stage, which are attributed to the Measure OP2-5.1, is very strong and inverted.
As other Baltic States are connected to Europe via Lithuania, the development of Trans-European roads is a necessity. EU support helps saving national funds. To make these improvements without the support, Lithuania would have to invest national or borrowed funds. It may be assumed that in these cases support and co-financing were used effectively.

However, these findings do not imply that Structural Funds are the only important determinant for changes in FDI and GFCF (by the government). Other determinants may cause a more significant impact than that related to Structural Funds. However, this demonstrates that changes in these expenditures are likely to be of importance for the future FDI and GFCF (by the government), especially as the new programming period starts in 2014. According to Mohl and Hagen (2010), the impact does not occur immediately, but with a time lag of up to five years. Thus, research conducted at a later stage could produce different results. As impact becomes apparent with time, more relationships may be found.

6. Experience of project delivering companies

To collect more information on experience of EU project delivering companies, an expert survey was undertaken in November 2012. As these beneficiaries are engaged in different economic activities, their experience cannot be ascertained using statistical data. 11 small and medium companies participated in the survey. The companies were considered for the position of an expert provided they have received support from EU Structural Funds for more than one project. One of the topics investigated by the survey was the use of consultancy services to prepare tender documents. On average, companies that used consultancy services spent from 2 weeks up to 1 month to prepare tender documents (Fig. 3).

Without consultancy services, this process may take up to 6 months. Consultants can reduce the time spent on preparation of documents by approximately 5 months. Companies that focus on their core activities and contract consultants for EU support-related tasks can save money, time and cut labour costs.

According to the research, in most cases (8 out of 11) companies that do not win tenders and remain without the support from EU Structural Funds still choose to implement their projects, however, at a smaller cost (such intentions were stated by 6 companies out of 8). The most frequent reason for the decision to not implementation projects without EU funding is the lack of money. Although most EU funded projects are necessary to satisfy urgent needs, some are not as necessary. Thus, in some cases EU support may reduce a company’s motivation to save and stimulate spending (as companies have to co-finance projects). Besides, this might result in delays of more important projects and achievement of more important aims due to a possible shortage of money. In such cases, as the government finances approx. 4% of a project value (Fig. 4), these funds would also be used ineffectively.
Fig. 3. Relationship between used consultancy services and the time required for preparation of documents (Source: created by the authors)

Fig. 4. Funding structure of projects delivered by business companies (January 2013) (Source: calculated by the authors based on data from the official website of Lithuanian EU assistance)

As project implementation is often a long and difficult process, companies were asked about problems they encountered. 6 companies out of 11 claimed they faced problems. Most of these problems (indicated by all companies) were related to filling of documents (Fig. 5).
Other frequently experienced problems were related to price changes and changes in the volume of required goods or services (each problem was experienced by three companies). Companies were also asked about the results achieved in regards to implemented projects financed from EU Structural Funds. 3 companies indicated that the achieved results exceeded all expectations. Other 8 companies achieved the planned results. The relationship between the number of problems faced by a company during project implementation and achieved results is presented in Fig. 6. This leads to a conclusion that the number of problems faced during the implementation process can impact on final results of a project.

Companies were asked about their plans to apply for more EU support in the current programming period (2007–2013). 7 out of 11 companies are still planning to apply for EU support in the current programming period. Additionally, companies were asked about their plans for the following programming period (2014–2020). All 11 companies said they were planning to submit applications for EU support in the upcoming programming period.
7. Conclusions

The real impact of EU support on a national economy is still disputed. The investigation was undertaken in Lithuania, one of five EU countries that are not divided into regions. It focused on three areas: attraction of foreign direct investments, state investments into capital formation, and experience of companies with the use of funds. Comparison of data on EU support by country revealed that Hungary occupies the first place according EU support per capita. Up to 1 January 2013, the greatest part of planned payments (in %) were made to Ireland. However, the absorption rate of EU funds says little about the efficiency and expediency of absorption. Some quickly absorbed support may bring little or no benefit to the national economy, or even affect it negatively.

With the help of the correlation method, it was established that EU support has an impact on attraction of foreign direct investments. The findings show that an increase in LTL 1 million paid to projects attributed to the Priority on R&D for competitiveness and growth of the economy (OP2-1) attracts approximately LTL 28 million of FDI. The increase of LTL 1 million paid to projects in the implementation stage, which are attributed to the Priority on the basic economic infrastructure (OP2-4), can attract LTL 109 million of FDI. While the increase LTL 1 million paid to projects in the implementation stage, which are attributed to the Priority on the development of Trans-European transport networks (OP2-5), can bring additional LTL 22 million of FDI.

Using the correlation method, it was established that the second type of EU support impact identified in Lithuania is related to state investments in capital formation. The findings show that the increase of LTL 1 million paid to project in the implementation stage, which are attributed to Measure 1 of the Priority 5 of the Operational Programme ‘Economic Growth’ (increase of Trans-European road transport infrastructure throughput and improvement of technical parameters) reduces state investments to gross fixed capital formation by LTL 6 million, as projects are of the highest priority and would have to be funded from national or borrowed funds if no support was available.

Relationships were analysed only with a 4-year time interval (year 2008–2012) as there was no more data at the time; thus, findings made with a longer time interval can differ. Some impact and relationships may be observed only once all planned funds are invested (some results might manifest after more than two years following the end of the current programming period). The regression analysis could be used in order to search and evaluate relationships and receive more information regarding the impact of the Structural Support on different indicators, which are important to Lithuanian economy. It could help to collect more knowledge on programmes, measures and etc., which have a significant impact on different indicators. Moreover, this could help understanding whether governmental and business funds were effectively spent.

The third area of research on the impact of EU support was undertaken on the level of companies, identifying their experience with the help of expert surveys. As these EU support beneficiaries are engaged in different economic activities, their experience cannot be ascertained using statistical data. The survey findings suggest that companies
that focus on their core activities and contract consultancy services for EU support-related tasks can save money, time and cut labour costs. It was also found that most companies would choose to implement their projects even if they did not receive EU support; however, they would look for ways to reduce project costs. Some companies use EU support to implement projects that are not of the first priority. EU support can distort a company’s motivation to invest. Companies should focus on the most important projects. This way own money will be saved. Companies should use more consultancy services for preparation of documents required to apply for EU support.

Having in mind that problems have an impact on final results of supported projects, companies and consultants should continue cooperating during project implementation as consultants are familiar with particular projects, which might help avoiding problems and achieving better results. This cooperation would allow companies to focus on their core activities and use their labour force more effectively.

References


**APPENDICES**

**Appendix A.** Dependence of foreign direct investments on support paid to projects attributed to different priorities (OP2-1, OP2-4, OP2-5) (Source: calculated by the authors)

![Fig. 1. Dependence of foreign direct investments on money paid to projects attributed to the OP2-1 priority (Source: created by the authors)](image-url)
Appendix B. Dependence of gross fixed capital formation (by government) on EU support paid to projects attributed to the OP2-5.1 measure (Source: calculated by the authors)

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