

THE EVALUATION OF THE IMPACT OF EU COHESION POLICY ON TOURISM IN THE SELECTED REGION OF THE CZECH REPUBLIC

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Abstract

The Czech Republic, like other countries of Central and Eastern Europe, has undergone the first full EU programming period, the period 2007 – 2013. All cohesion policy interventions aimed at reducing regional disparities were completed in 2015, according to the $n + 2$ rule. Impact assessment of programs and projects were in the forefront of EU institutions, individual governments and regions. This article aims to evaluate impacts of public support on a tourism area in the selected Southwest NUTS II region in the Czech Republic. Statistical methods, qualitative research, Counterfactual Impact Evaluation (CIE) methods and principles of theory-based impact evaluation are used for the impact assessment. When evaluating the impact of interventions in tourism in the Southwest NUTS II region it was found, from a methodological point of view, that the major barrier to the use of Counterfactual Impact Evaluation methods was poor accessibility and especially quality of data. The evaluation shows that benefits are observable in terms of specific projects or locations, but cannot be seen in the larger territory of a NUTS II region. Here it is evident that tourism is a sensitive segment of the national economy mainly reactive to the economic situation in source countries, the peace situation in the world and, of course, to the purchasing power of the population.

Key words: CIE methods, impact evaluation, tourism

1. Introduction

During recent years, there has been increased interest in the use of quantitative methods to express the impact of development programmes worldwide. In the case of the EU Member States this speaks more about programmes to reduce regional disparity than on development projects, however the principles of impact evaluation are similar worldwide. The aim is to determine whether the effects of government aid and their compliance investments from private sources had the expected effect. This opened a space for other uses of mathematical and statistical methods in economics and reinforces their importance. This article provides an assessment of the impact of intervention from public sources in the tourism sector on a selected region of the Czech Republic, the region NUTS II Southwest. Impact Assessment was used in a mixed evaluation design, which included both qualitative and quantitative methods, principles of Theory-based impact evaluation and elements of counterfactual evaluation (deadweight and leverage effect).

The main Principles of Theory-based impact evaluation are: i. Map out the causal chain (program theory); ii. To understand the context; iii. To anticipate heterogeneity; iv. Rigorous evaluation of impact using a credible counterfactual method; v. Rigorous factual analysis and

vi. To use mixed methods (White, 2009). All of these principles were used in the observed study.

Tourism represents a variant called “development pole” in a number of places and regions, the positive economic development signals the creation of new jobs, respectively, a greater number of self-employed persons (Studnička and Tinková, 2014). Tourism has economically and statistically closed branches, of which there are meaningful economic indicators, but there is given a summary of the various activities and the activities of people that engage and penetrate to varying degrees in many economic sectors. Tourism has a transverse character (Petříčková, 2011). Just for that reason, much attention will be paid to the availability and quality of data.

2. Counterfactual Impact Evaluation Methods

Counterfactual theories began to develop in the seventies of the last century, when David Lewis (1973) could be regarded as the most prominent popularizer and analytics. The essence of Counterfactual Impact Evaluation (CIE) methods are quantitative data analysis based on the comparison of two groups of subjects. Access is used to express a hypothetical estimate of the impact of intervention from public sources. The CIE approach therefore tries to bring an answer to the question: "What impact does the public support have on the area?" Or "Would the development of the monitored area be the same without public support?". It is therefore a verification method which looks back in history to see what would occur in a given situation without aid. Methods which fall into the category of CIE are based on a large number of data in at least two comparable periods. It is therefore a method of measuring impact of intervention from public sources.

Using the CIE methods in practice has been dealt with by a number of authors (Khandker et. al., 2010; Kváča and Potluka, 2011; Potluka and Brůha, 2011; Martini, 2009; and others) and institutions such as the European Commission (2008) in a document from 2008 "EVALSED: the resource for the evaluation of socio-economic development", further European Commission (2012) "Design and Commissioning of Counterfactual impact evaluations: A Practical Guidance for ESF Managing Authorities" or OECD (2004), "Evaluating Local Economic and Employment Development: How to Assess what Works among Programmes and Policies". In the Czech Republic Potluka and Špaček (2013) dealt with problematic CIE methods in relation to the evaluation of the Operational Programme of human resources and employment.

Below is a brief overview of the methods used to investigate the effects of public subsidies from EU structural funds. The phrase "impact evaluation of structural funds" is not used deliberately. First, you cannot use the CIE methods to measure the impact of the Structural Funds as a whole and, secondly, it is not clear what or who would qualify as having received the respective impact. Using the CIE methods, values are sought which can be attributed to the intervention of public resources, which are positive contributions to public investment.

The CIE methods can be divided into two main groups: experimental and non-experimental (or a quasi-experimental take). As to the first method, which belongs to the experimental group of methods, may be mentioned Randomized Control Trials also called "social experimentation" which is an exploratory “fishing” method based on a random component. There is a random assignment of subjects to experimental and control groups before and after comparison. The key point is the randomisation that ensures the two groups are statistically equivalent in all respects at the point they are randomised. Subsequent to randomisation, the treatment group is exposed to the intervention which is the focus of the evaluation and whose impacts or effects are to be measured (European Commission, 2012, p. 9). In this case, it is difficult to imagine that there would be subsidies from structural funds

within individual calls assigned randomly in a group of entities that would meet not only all the administrative requirements and there would be a project application submitted that had reached a certain quality set as far as a minimum number of points.

Among the most frequently used methods belonging to the quasi-experimental group are four basic methods, namely: a. Propensity score matching; b. Difference-in-differences; c. Regression discontinuity design; d. Instrumental variables.

The essence of these methods is to compare the group of subjects who received the support with those who did not receive it. The objective is to obtain an unbiased estimate of the change due to the intervention. Because treatment and control groups are not formed at random, quasi-experimental designs require far more attention to methods of accounting for potential differences between treatment group members and potential controls that are likely to affect the decision to participate and the results. The selection of a plausible control group is key (European Commission, 2012, p.13). The following CIE methods are based on material “Processes and methods used in counterfactual impact evaluations for Employment Operational Programme in the period 2014 – 2020” by the authors Potluka and Špaček (2013) treated with the support of Omega TA CR TD010083.

- a. Propensity Score Matching - basic idea of matching (pairing) is an effort to build a control group, which is in all respects, except for the support received, which resembles as closely as possible the group of recipients of the support. In the control group are enrolled beneficiaries who agree in their characteristics with the supported recipients. PSM summarizes all of the observed characteristics of the entity into a single number (if you are working with different characteristics concerning the method of Multiple Regression). In this way it is possible to reduce the problem to a single dimension. Each beneficiary is paired with an unsupported entity that has a similar likelihood of getting support. This probability is calculated based on observed characteristics and is expressed solely using propensity scores. The impact is then again obtained as the difference between the average outputs of the two groups.
- b. Difference-in-differences - differences of method differences are based on the fact that the impact of policies on the monitored output can be calculated using the two extremes. One difference is determined in time (before and after the intervention), the second difference is determined by entities (the supported and the unsupported). To use this method, it is also necessary that the intervention was discreet in nature and clearly identify which units are exposed to intervention and which are not. The method is difficult to apply to an intervention of a continuous nature.
- c. Regression Discontinuity Design - Regression Discontinuity is applicable if it is entitled to participate in the program (intervention), which stipulates that entities above / below a certain level are eligible for the program, while subjects below / above this threshold are ineligible. This boundary is formed by dividing the score in continuous variables such as the age of persons, household income, the number of points assessed in the application or the number of employees in enterprises. The estimated impact of using RDD can be obtained by comparing beneficiaries and unsupported entities who are not too far from the specified limits. In the vicinity of the limits the situation arises that resembles random selection. Based on the comparison of these two groups of subjects, we can assess the impact of interventions. The primary advantage of this method is that it is possible to estimate the impact without any additional assumptions. The disadvantage is that the estimated impact can be interpreted only "locally" in the vicinity of the partitioning scores, rather than for the entire population.
- d. Instrumental variables - This method can be used in cases where exposure or intervention policy is not just the decision itself applied to authorized applicants, but also to a large

extent by events and processes that are beyond their control. These "involuntary" factors can remove selection bias. The whole model is similar to an experiment. For the method to be used, it must satisfy two conditions. The instrumental variable must first be a significant predictor of the likelihood of getting support. On the other hand, the instrumental variable must not affect the examined indicator other than through obtaining support. For the use of instrumental variables to estimate the impact of interventions, there are two basic approaches. These methods are the Wald estimator and a two-stage least squares (two-stage regression).

3. Analysis of the Impact of the Intervention of EU Structural Funds for Tourism in a Selected Region of the Czech Republic

Tourism in the Czech Republic was largely financially supported by the regional operational programs of the EU programming period 2007 – 2013. With one exception was tourism considered a dedicated priority axis (Plzáková, 2013). The Regional Operational Programme Southwest Tourism was identified as priority axis number 3 with the following areas: 3.1. Development of tourism infrastructure; 3.2 Revitalization of monuments and utilization of cultural heritage tourism development; 3.3 Development of tourism services and marketing tourism products.

In the conventional division of operational programs, it is first necessary to recognize that there are several possible levels of evaluation. In the broadest context, it is a monitoring and impact evaluation setting and implementing intervention policies, as well as the evaluation of programs to evaluate individual priority axes, measures and challenges. When evaluating programs, it takes into account the needs assessment processes and impacts of the program. However, according to Kváča and Potluka (2011) CIE methods are not suitable for the evaluation of programs under the EU structural policy, and especially difficult for the fulfillment of the conditions of a large number of cases observed and the homogeneity of the monitored cases. However, they are useful for evaluating individual challenges or areas of support.

3.1 Methodology

Selected CIE methods are applied to data derived from the IS Monit7 + (data are from September 19, 2014) and the Czech Statistical Office (hereinafter CZSO). The limiting factor of working with this data results from a change in methodology calculation CZSO data monitoring in tourism on the basis of census execution in 2012. Some categories of data are becoming more readily comparable. In addition to testing the suitability of CIE methods for evaluating the impact of interventions of the Structural Funds on tourism in the Plzeň and South Bohemian Region (NUTS II Southwest) other methods of statistical analysis will be used on the above mentioned secondary data. As an additional tool for assessing possible impacts of public interventions in the tourism sector primary data collection was conducted using a questionnaire. The questionnaire survey was submitted by representatives of both supported and unsupported entities (the resulting ratio was approximately 4: 1) within the challenges aimed to promote tourism of the ROP Southwest in 2007 – 2013.

3.2 Input Data Analysis

As already mentioned above, the Southwest Cohesion Region consists of two regions: Pilsen Region and South Bohemia Region. From the perspective of tourism there are two

divided regions, which the following analysis also shows. The basic characteristics of the level of tourism in the region NUTS II Southwest is shown in the following table.

Table 1: Basic characteristics of the level of tourism NUTS II Southwest

Indicator	Pilsen region	South Bohemia region
Number of accommodation establishments	Decreased (grown after corrections 2012)	Stagnated (grown after corrections 2012)
Number of beds	Decreased (grown after corrections 2012)	Stagnated (grown after corrections 2012)
Total number of guests	Increased	Increased
Number of foreign guests	Increased	Increased
Share of foreign guests	Stagnated	Stagnated
Total number of overnights	Decreased	Slight decline (slightly grown after corrections 2012)
Domestic versus foreign tourists	Domestic prevailed	Domestic prevailed
Average length of overnight stays	2.6 nights	2.8 nights
Net use of beds	23.5 % (Decreased)	25.4 % (Decreased)
Number of entities in tourism	Stagnated	Stagnated
Proportion of entities in tourism to all entities in the region	Stagnated	Stagnated
Number of employees	Decreased	Fluctuated
Source country/region of foreign tourists	Germany, Austria, the Netherlands, Slovakia	Germany, Austria, Asia, the Netherlands, Slovakia
Number of accessible historical buildings	20	34
Number of visitors to monuments	Decreased	Slightly decreased
Seasonality	High (summer months)	High (summer months)
Satisfaction with stay	Almost 100% satisfaction	Almost 100% satisfaction

Source: the author.

Within the Priority Axis (PA) number 3 which focused on tourism development, there were as of September 19, 2014 252 projects supported totaling 3,739 million CZK total eligible costs, of which 2800 million CZK (75%) were accounted for by public funds and 939 million CZK (25%) by private funds. In the reporting period were submitted 1,103 applications in the general volume of almost 16 billion¹ CZK in European and national funds. The challenges were allocated almost 5 billion CZK from European and national resources, which means that many projects could be supported, although the assessment of applications for aid exceeded the elimination of the 60 points. The implementation was based on the evaluation made, and with regard to the amount of funds allocated in the individual calls, approximately a third of applications were selected, a total of 371 projects. Of these projects, however, 21 did not complete the implementation and for four projects in the area of support

¹ The short scale definition is used.

3.1 implementation was temporarily suspended. At the time of this evaluation it was under Priority Axis 3 for a total of 94 projects in the implementation phase and 252 projects with completion of implementation.

Table 2: Number of projects in different areas of intervention PA3 according to the status

Project status	Support area			PA3
	3.1	3.2	3.3	
Unsupported projects				
Project application failed to meet the conditions of acceptability	98	28	20	146
Project application failed to meet formal requirements	36	13	1	50
Project evaluated, reached the minimum limit of points	31	12	14	57
Project recommended / approved	320	47	64	431
Project did not meet the conditions for issuing decision / signature of the contract	11	3	3	17
Project application withdrawn by the applicant / terminated by Managing Authority /Intermediate body	23	6	2	31
Project suspended	4			4
Unfinished projects				
Project completed / withdrawn	16		1	17
Decision / Contract is terminated by MA / Ib	2		2	4
Projects in progress	71	23		94
Projects with implementation completion				
Implementation of the project completed	21	2		23
Financing of the project completed	48	13	6	67
Expenditures of project certified	55	35	30	120
Project finally completed	29	9	4	42
Total Priority Axis 3	765	191	147	1,103

Source: the author based on IS Monit7+ using data as of September 19, 2014.

The supported projects were divided into seven categories according to the material focus of the project (for details see Table 3).

The size of the projects in terms of volume of funds expended showed relatively high differences, even within individual groups of activities. The average volume of projects amounted to 14.8 million CZK total eligible costs. Half completed projects have spent less than 8.4 million CZK. The average deviation from the mean value, however, was 23.0 million CZK, which is reflected in the high differences in the size of projects that ranged from 300 thousand CZK to projects worth more than CZK 100 million.

In terms of geographic breakdown, the region supported a larger number of projects (219 of 346) and 58% of total EU subsidies were directed here. In the South region mainly projects for the development of accommodation capacities, restoration of monuments and construction of bike paths were supported. Conversely, projects for the development of museums and cultural facilities prevailed in the Pilsen region (9 out of 15 projects). This material focus corresponds to the potential of tourism identified within the characteristics of tourism. Coverage of the territory implemented projects positively correlated with the attractiveness of the region for tourism as measured by the number of visitors (of guests).

Table 3: The number and volume of projects according to their main activity

Activities	Number of projects	Eligible expenses (Thousands CZK)			Share activity/subsidy	
		Subsidy EU+RR	Region + city	Private		Total
bike trails	35	253 638	95 638	696	349 972	9.9%
sports and recreation	44	688 479	75 443	213 941	977 862	26.8%
accommodation	50	465 885	339	423 292	889 515	18.1%
spas, wellness, congress	9	79 694	--	99 821	179 514	3.1%
museums, culture	15	156 707	10 335	38 147	205 189	6.1%
monuments	59	793 264	37 964	138 240	969 468	30.9%
advertising	40	133 278	9 592	24 989	167 859	5.2%
Total	252	2 570 944	229 310	939 125	3 739 379	100 %

Notes: Public funds correspond to the actual expenditure incurred. Private funds corresponding to the amount of contract / addendum.

Source: IS Monit7+ using data as of September 19, 2014.

In order to uncover links between government subsidies and regional characteristics have been through selected indicators calculated correlation coefficients², which make these connections can reveal, or at least they point out. For purposes of the study were the following variables, among which were calculated correlation coefficients:

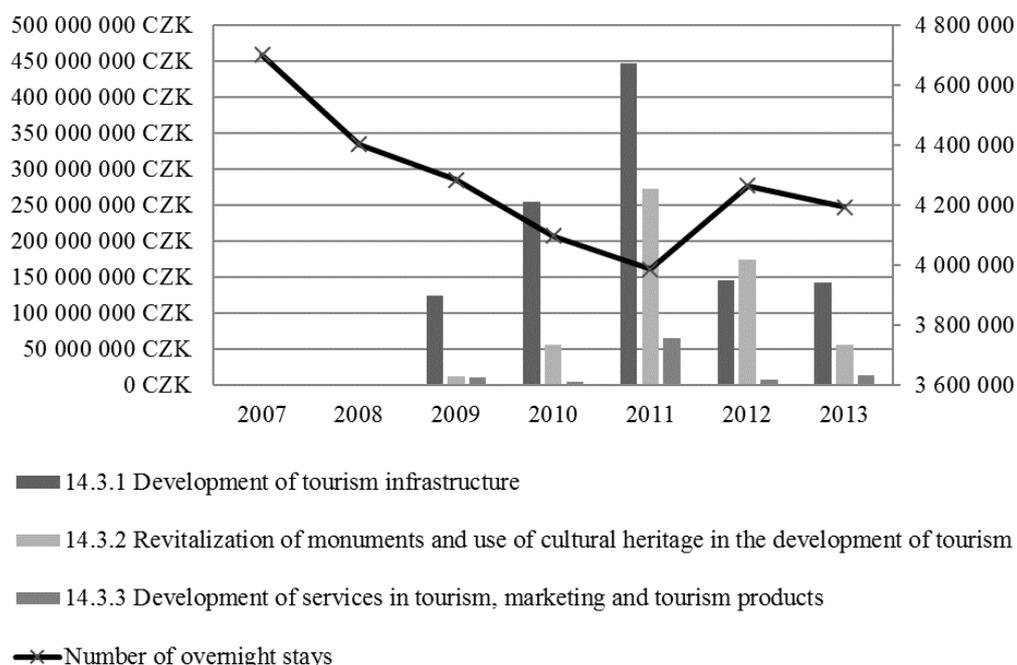
1. potential areas,
2. amount of subsidies,
3. number of inhabitants,
4. arrival at accommodation establishments (in 2013),
5. amount of funding / inhabitants.

For all supported projects the correlation between the number of projects and the potential territory amounts to 0.69. In terms of number of projects implemented correlations between the number of projects supported and the number of guests also exhibits a similar value of 0.67.

Among the variables a positive association was generally found. The strongest correlation was identified in the case of the relationship between the potential of the area and its visitors, presented arrivals in accommodation establishments. Low levels of association were found in the relationship between the conversion amount of subsidies per one inhabitant, and other variables. It should be noted that these relationships are identified within the supported projects. This means that points to a relationship only in selected areas respectively, in a limited group of entities that perform their activity in the field of tourism.

² Using the Pearson correlation coefficient (for which the calculation used standardized variables standardization was performed using the Z-score).

Figure 1: Development of the subsidies (in CZK) in individual areas of support and development of tourism in the number of overnight stays in NUT II Southwest in period 2007 – 2013

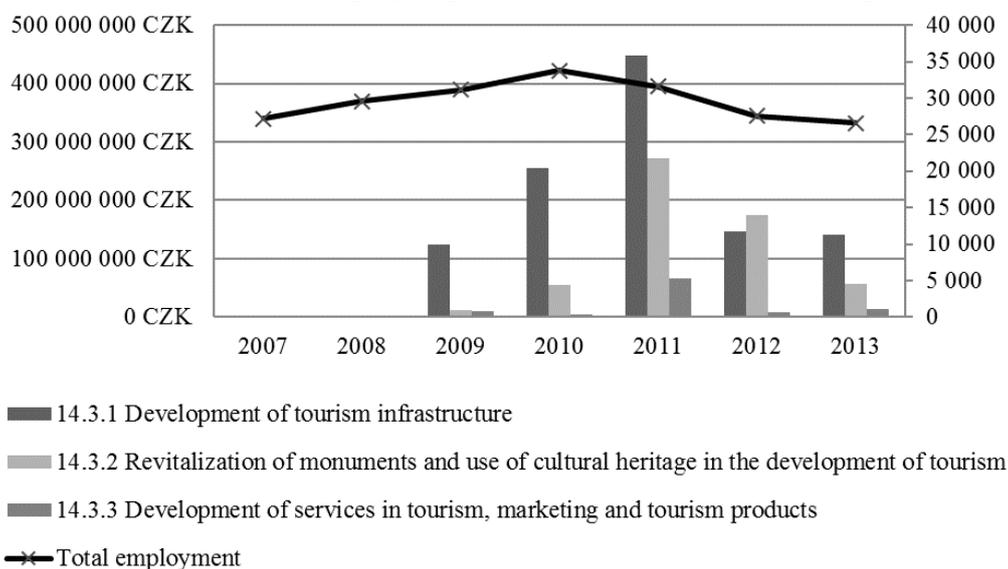


Source: the author based on data from CZSO and IS Monit 7+.

It is interesting to note the development in relation to the amount of intervention from European sources that the development of the number of overnight stays, which is related to all three areas of support and development of the number of people employed in the national economy in category I (Accommodation and food service) and R (Arts, entertainment and recreation activities). Developments in the number of overnight stays at accommodation establishments fell sharply in the period 2007 to 2011, then from 2012 growth occurs. This increase follows the nationwide trend, however, due to a change in methodology for data collection from the calculation CZSO included a slight decline in 2013. The main indicator for the tourism economy of the region is certainly the number of newly created jobs. The tourism percentage of total employment (number of jobs) was 4.46% in the year 2014 in the Czech Republic. In total, the previously completed projects PA3 created 319 new jobs. With regard to the focus of the projects, projects to develop accommodation had the largest contribution to job creation, within which 223 jobs were created. As stated in Figure 3 since 2010 there has been a decrease of people employed in the main areas of activity within tourism regardless of expenditures. At the same time, the number of new jobs is one of the main monitoring indicators of priority axis 3. In addition to the rules of cohesion policy it is necessary to observe the 5-year period of project sustainability, which means that the number of jobs created thanks to the implemented project doesn't lower their number. Limits in the reported statistics can show that statistical data involving the notion of the number of employees and the operational program works with the concept of the number of jobs. However, if you compare the number of both indicators specified in the employment module in the Satellite Account of Tourism for the year 2013, the number of jobs in the characteristic tourism sector was 165,365 and the number of employed persons was 165,010. From this perspective, we consider both categories to be comparable. The downward trend of employed people in tourism would rather show that, on one hand, there can be new accommodation

facilities via the promotion of public subsidies from the EU, while the original devices that the grant not did not request or receive, could be cleared, and thereby avoid even a positive increase the number of employed persons.

Figure 2: The amount of subsidies (in CZK) in individual areas of support in tourism development and the number of employed persons in NUT II Southwest in period 2007-2013



Source: the author based on data from CZSO and IS Monit 7+.

Furthermore, basic indicators were investigated based throughout the Southwest Region.

Table 4: Correlation matrix of selected indicators

	Subsidies	Number of overnights	Number of persons employed in CAE	Number of establishment	Number of guests
Subsidies	1	- 0.814*	0.346	- 0.203	- 0.180
Number of overnights	- 0.814*	1	- 0.534	0.051	0.327
Number of persons employed in CAE	0.346	- 0.534	1	- 0.770*	- 0.778*
Number of establishment	- 0.203	0.051	- 0.770*	1	0.589
Number of guests	- 0.180	0.327	- 0.778*	0.589	1

Note: * Correlation is significant at the 0.05 level.

Source: the author based on data from CZSO and IS Monit 7+.

Thus, it was ascertained the overall impact of subsidies on the development of the region in terms of tourism. If we wanted to find out individual dependencies between variables, we find a weak direct relationship between the amount of the subsidy and the number of people employed, the number of overnight stays and the number of accommodation facilities. The number of overnight stays is inversely related to the strong dependence of the amount of subsidies. It means that despite the expended amount of subsidies, the number of overnight stays in the region declined. A positive correlation exists between the number of accommodation facilities and number of guests, which is a logical relationship. The

relationship between the amount of subsidy and the number of people employed in tourism is direct but with a weak correlation coefficient of 0.346.

3.3 Filling Indicators

The relevant indicators can be considered as such, which are significant or important in relation to the objectives of ROP SW, i.e. they appropriately reflect the intended intervention logic of the program. Indicators should be defined at the level of output (indicate the scope of activities), the outcome (indicate the intended immediate change) and ideally also the impact (testify to long-term change in the broader context).

Priority axis Tourism has identified the following indicators:

- Output indicators: Number of supported projects in tourism development; Number of publicity or marketing products for tourism
- Result indicators: Length of new cycling paths and routes; Length of new trails exclusively for hiking and horseback riding; The number of new and refurbished sports and recreational facilities in total; The number of newly built or reconstructed beds; The number of newly created jobs in the projects in development of tourism; The number of newly created jobs for men; The number of newly created jobs for women; Number of reconstructed historical buildings; The number of products created to guide and direct visitors.
- Impact indicators: Guests in the region - number of overnight stays

Target values of output and result indicators have been met by all indicators except for two indicators. The indicator “Number of newly built or reconstructed beds” is fulfilled with only 64% of the target value and projects that are still under implementation can expect fulfillment of 68%. The indicator for “Length of constructed cycling routes” for which the target value is currently fulfilled to 78%, has currently sufficient reservoir projects under implementation for meeting the target value of 141%. Taking into account the projects under implementation and assuming the successful completion occurs in addition to the above indicator, the number of newly built or reconstructed beds and a further indicator “Number of new and upgraded facilities for spa and other convalescence”, including construction and modernization of the supporting infrastructure, which is fulfilled with 100% markedly exceeded target values. In particular, the number of renovated historic buildings, where we can expect a final value 2.5 times exceeding the original target, which was set at 30 objects. More than 3.5 times than the target can be expected in the number of new and refurbished sports and recreational facilities with the original target of 60 facilities and the expected performance of the indicator of 216 facilities. The highest target value will, in the event of completion of the projects, be achieved in the indicator “Number of new and reconstructed facilities for cultural facilities for tourism”, where, thanks to the latest challenges no. 23 and 29 should have a total constructed / reconstructed total of 51 instead of the target of 8, then the value will be exceeded by more than 6 times. Development in the main indicators including absolute terms in the following Table 5.

Table 5: Change indicators relevant to specific objectives PA3

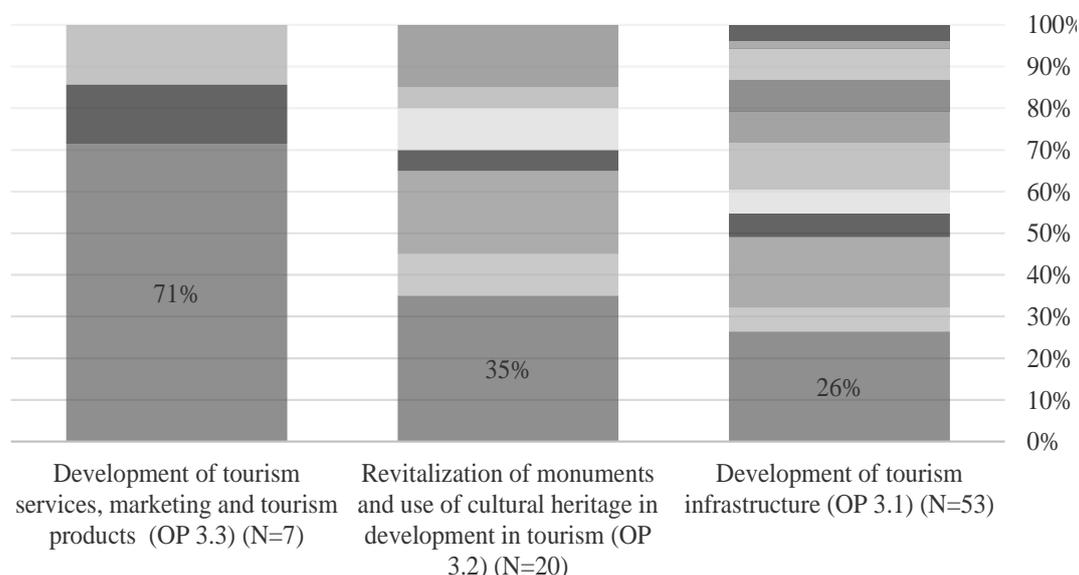
Indicator	Value before intervention in CZK (2007)	Value after intervention in CZK (2013)	Change
Total number of visitors	1 492 843	1 697 346	+204 503
Total number of overnights	4 700 483	4 658 094	-42 389
Average length of stay	3.1	2.7	-0.4
Share of foreign visitors (share of number of arrivals)	32.4 %	31.6 %	-0.8 %

Source: the author.

3.4 Verification CIE methods using

As mentioned, the condition for using the CIE methods is to have a large amount of high quality data, which form two groups - implicative and control. Simple entry calculation of what information can be called the Leverage effect, which is, in other words, the multiplier effect of public finances. It answers the question, how much funding from private sources is created from public support. If this procedure is applied to the data, then there were 2,570,944,000 CZK invested from public resources in promoting tourism from EU funds, CZK 229,310,000 of public resources from the regions and municipalities, and 939,125,000 CZK from private sources. Overall, 3,739,379,000 CZK was invested and if this sum is divided by the share of funds only from the side of the EU then we get the result 1.45. This result is, however, somewhat misleading. It would mean that companies are waiting only for investment by the EU and by themselves would undertake no action. More accurately, there would be summed public sources, i.e. sources of EU and national resources in proportion to their size contributed to the additional effect. Then the result of the share of total investment and public funds would be 1.34. It would mean that 1 CZK invested from public sources produces 34 cents of private investment. Here it would be necessary to deduct investments from private investment in the control group (these are entities that have not received a subsidy), then we would get the exact effect of public support. Unfortunately we do not have this control group. We can help by calculating the so-called effect of deadweight intervention, which can be characterized as the observed changes in the group of beneficiaries after the implementation of financial intervention of public expenditure (operating) program, which would have occurred even without this intervention. Observations / estimates of deadweight thus points to the fact that when public resources are spent with some degree of purpose, which could be achieved without the involvement of public resources. So it can point out the partial absence of the desired effect of intervention. To estimate the deadweight outputs from the questionnaire were used where two groups were surveyed, a group of entities supported and unsupported entities.

Figure 3: The rate of implementation of projects without public support



Source: the author.

The following table shows the average value of deadweight by the representation of individual activities within projects PA 3.1. From the table it can be seen that the activities associated with spa and wellness facilities would have been realized without the support. Similarly, activities related to accommodation and congress facilities would have been realized without the subsidy, at least in half of the cases.

Table 6: Relative expression deadweight according to categories of projects implemented in the PA 3.1

Activities – PA 3.1	Average value of deadweight effect
Repaired space in the spa complexes	100 %
The renovated and / or new curative (spa, wellness) equipment	73 %
New and / or renovated beds	60 %
Renovated and / or new facilities for congress tourism	54 %
Renovated and / or new accommodations	51 %
New and / or revised cultural facilities	42 %
New and / or revised fitness equipment	34 %
New walking paths and bike trails	31 %

Source: the author.

It should be noted that 55.6% of the investments would have been implemented even without public support. If we return to the lever effect, then the additional value of private investment was only 1.19 i.e. 1 CZK public resources would generate 19 cents of private investments. If we compare this added value with the administrative costs of managing the operational program and administrative costs for the management of the projects themselves, it is a very questionable rate of benefit.

When applying the CIE method referred to in Chapter 2, the barrier was the lack of individual data in the tourism sector. According to the calculation CZSO individual data are

unreliable and adjusted in order to preserve the quality of outputs from the calculation. CZSO office decided not to provide such data. This means that no data is available especially for the control group. For example, you cannot measure how many guests were accommodated in the supported facilities and the unsupported ones or how they evolved in the number of employed people both groups of subjects. Sales and numbers of employees, in addition, were granted only to enterprises with 20 and more employees. This group of companies with 20-50 employees used the selection in the calculations of CZSO, therefore this does not have all the information for small and medium-sized enterprises (official statements, calculation CZSO). For the tourism industry, it is typical that 75% of businesses fall into the category small businesses. In this case, analysis of the available data was misleading.

4. Conclusion

The aim of the article was to verify the use of counterfactual impact evaluation methods in the area of tourism supported by the operational program in the Southwest region of the Czech Republic and process the evaluation of the impact of interventions. From a methodological point of view, the conclusion noted that the proposed method as a difference-in-differences regression or discontinuity design could not be used due to unavailability and low quality of data. Data from the tourism sector, such as number of employees, sales, as well as the number of guests from the perspective of individual businesses are both considered as individual data and also its credibility burdened by high levels of the gray economy in this field. The actual evaluation outputs are shown to benefit the public, rather than intervention at the local level and at the level of individual projects than at the NUTS II level. In conclusion, the analysis of the development of tourism shows, the current economic situation is manifested by the reduced number of the Czech Republic's foreign guests, and the reduced the length of stays (foreign guests only). On the other hand, there are increases in the number of trips and thus visits to the region. Based on the expert assessment we can assume that solely trends in tourism have more influence on the achievement of the objectives of PA 3 than the supported projects. The effects of interventions on ROP SW can, therefore, be expected mainly at the local level.

However, direct investment in the tourism sector is not provided in the current programming period 2014 – 2020 by the EU. Endorsements in the area of cultural tourism indirectly linked to the protection and revitalization of cultural heritage. According to experts in tourism will lead to re-settlement of the market in the tourism sector.

Generally, the results of the analysis indicate a lack of quality data on tourism. It turns attention back to the idea of regionalization satellite account of tourism, the issue which is discussed by the author in other studies (Petříčková, 2011; Dömeová et al. 2007).

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