

# Does the type of training matter?

## Evaluation of the European Social Fund assistance in companies

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**Abstract** — The EU Cohesion Policy is influencing behaviour of many companies in EU. According to the Europe 2020 strategy should the EU policies improve competitiveness of companies within EU and improve employment.

The research question of this research concern what type of training highly improves employment in companies. The research is done on the European Social Fund assistance in the Czech companies within 2008 – 2011.

The results show that training in internationally certified fields have highest impact on employment. On the contrary, soft skills training have only marginal effect, or even negative.

**Keywords**—companies, impact evaluation, training, employment, European Social Fund, Cohesion Policy

### I. Introduction

Mainly the qualitative methods have been used in the recent evaluation practice in the EU Cohesion Policy. There has started change as the new regulation 1303/2013 has been introduced. It involved also Articles with requirement to conduct impact evaluations.

There are contradicting results of several studies of active labour market policies. The study of Wunsch and Lechner (2008) gives pessimistic view of impacts of reforms on the labour market in Germany after 1998. Lechner, Wunsch and Scioch (2013) even points out that there are negative effects on companies when their employees participate in programmes of active labour market policies. Lechner, Miquel and Wunsch (2011) found positive effects on employment on supported individuals. Positive impacts have been also found by Criscuolo et al. (2009) on the programme Regional Selective Assistance in Great Britain. Abramovsky et al. (2011) have not proved effects of training on employees with low qualification on their employment. Hamersma (2008) has proved short-term effects on employments in companies, which disappear in long-term. To sum up, there are more

studies with no positive effects of public policies on employment but the overall picture is unclear.

The results of the above-mentioned studies are here for evidence from other countries which are beneficiaries of the EU Cohesion Policy. We mention them although Kluge and Schmidt (2002) point out, that labour markets differ too much in different countries that it is not possible to disseminate this experience automatically.

The paper cover a gap in research concerning evaluation of EU Cohesion Policy's impact on employment and adds to discussion on effects of public policies on employment. Our research question is what type of training highly improves employment in companies? The research is done on the European Social Fund assistance in the Czech companies within 2008 – 2011.

The paper is organised as follows. First, we introduce the Operational Programme Human Resources and Employment to get insight into the researched policy. The second chapter presents data and methodology. The fourth part discusses results and findings. The final chapter concludes.

### II. Context of the assistance

The Operational Programme Human Resources and Employment, support area 1.1 aims at active labour market policies and increased qualification and modern human resources management systems in companies (MoLSA, 2011, p. 15).

The companies could apply for the assistance in particular call for proposals. Companies are thus final beneficiaries managing project if they are successful applicants. The calls 35, 39 and 60 are used in this analysis as there were only companies as eligible applicants. The table I summarises number of applications.

TABLE I. NUMBER OF APPLICATIONS

Call Nr.	Rejected	Supported	Total
35	741	1 061	1 802
39	243	104	347
60	277	185	462
Total	1 261	1 350	2 611

Source: Monit7+, own calculations

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The applicants have proposed project in which they prepared a list of training for their employees. There have appeared also proposal to improve human resources management systems in companies. Each applicant had to justify which types of training are the most important for further development in an analysis of needs.

The appraisal process has three steps. Firstly, the employees of the Ministry of Labour and Social Affairs check whether the applications fill all formal requirements. Then independent appraisal experts are randomly selected. Those appraisal experts evaluate application according general criteria defined by the Operational Programme. Last step concerns evaluation committee which decide which projects are supported. The committee has only right to reject project, but not to support already rejected applications.

### III. Data and methodology

Dataset is a crucial requirement for the analysis. We have combined two main sources. The first one is the dataset of the Czech Statistical Office for companies between 2006 and 2011. The second one is the monitoring system of the European Social Fund Monit7+.

NACE (type of industry), region (at the NUTS II level) and employment defined as full time equivalent has been used from the Czech Statistical Office. Monit7+ has provided us with information on whether a company has been supported or rejected (or even non-applicant) and what type of training was planned in a project.

The research design enables application of the difference – in – differences method combined with propensity score method. The other methods do not tackle with comparison between supported firms and rejected applicants. For example the regression discontinuity design cannot work with more types of support. It can be done through multi-dimensional regression discontinuity design, but dividing data sample to subsamples decreases number of observations in each group. We do not have appropriate instrumental variable to apply two-stage least-squares (2SLS) method. Thus, we explain change of employees on propensity score and dummy variables of the type of training.

The propensity score has been estimated at the first stage of a logit model, where success in application is explained by the company size, NACE and region of the company. It enabled us to pair companies from both groups supported and rejected.

We count with eight types of trainings:

- Basic computer and IT skills (**k11**),
- Work with applications of Ms Office (**k12**),
- Skills in IT and programming CAD, etc. (**k13**),
- Language training (**k2**),
- Soft skills – communication skills, leadership, training of operational management, etc. (**k3**),

- Manual skills – welding, tooling, service of CNC machines, service of specific machines, etc. (**k4**),
- Legal trainings – Labour code, Security in work, legal norms in taxation and accountancy (**k5**),
- Others (**k6**).

The information on type of training was gained from the applications in the Monit7+. It is possible that one application contain more than one type. In such a situation all relevant training were taken into account.

### IV. Results and discussion

The research design follows the fact that we compare supported and rejected firms. Results are described in the table II. We present difference of a coefficient of the particular dummy variable for type of training to average support. If the result is a positive, the particular type of training has higher impact than is average for the call for proposals in question. It means that negative number does not mean a negative effect. It is just lower impact in comparison to other types of training.

The comparisons with average are above average in the case of the training of Ms Office (k12), foreign languages (k2), soft skills (k3) and other skills (k6). It is necessary to mention that statistically significant results are only in the case of training of foreign language. In the case of basic computer skills (k11) and skills in IT and other computer skills (k13) are the point estimates negative, but insignificant.

Only in the case of foreign languages are the estimates significantly different in effects on employment. Such a type of training increases employment by 4 jobs in comparison with average effect of trainings.

TABLE II. EFFECT OF TYPES OF TRAINING – COMPARISON OF SUPPORTED AND REJECTED FIRMS

Type of training	Point estimate	p-value
k11	-6,09	0,16
k12	5,73	0,71
k13	-2,34	0,17
k2	<b>4,21</b>	<b>0,06</b>
k3	0,71	0,84
k4	-5,21	0,51
k5	-5,79	0,82
k6	3,37	0,53

Source: Czech Statistical Office, Monit7+, own calculations

When we divided data according to a specific call for proposals, the results for supported firms show that manual skills and legal trainings have the highest impact (and statistically significant). Soft skills have negative impact among supported firms.

The results for legal training differ between call for proposals 35 and 60. We explain such a difference by the aim of those two calls.

TABLE III. ESTIMATES OF IMPACT ACCORDING TO TRAINING AND A CALL AMONG SUPPORTED FIRMS

Training type	Call 35		Call 39		Call 60	
	Point estimate	p-value	Point estimate	p-value	Point estimate	p-value
k11	10,38	0,49	47,38	0,39	4,38	0,46
k12	-13,43	0,45	2,12	0,33	-24,89	0,33
k13	-0,44	0,19	9,47	0,14	9,77	0,31
k2	0,85	0,26	5,99	0,38	23,23	0,16
k3	2,64	0,42	<b>-64,96</b>	<b>0,00</b>	-12,50	0,11
k4	<b>53,84</b>	<b>0,01</b>	<b>19,54</b>	<b>0,08</b>	<b>6,77</b>	<b>0,06</b>
k5	<b>46,12</b>	<b>0,08</b>	-13,59	0,18	<b>-67,40</b>	<b>0,10</b>
k6	-7,27	0,35	-178,01	0,32	161,44	0,25

Source: Czech Statistical Office, Monit7+, own calculations

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## v. Conclusions

The impacts of different types of trainings support an idea that more effective are those trainings which cover easily objective verifiable achievements of trainings such as those with international certificates (language skills, international welding certificates or international project management). Other training in which the participants simply got a certificate of attendance are less effective.

The conclusion and recommendation for the managing authority of the Operational Programme Human Resources and Employment is that not to support soft skills without international certificates. Main supported activities should be concentrated in those trainings in which the managing authority is able to check objectively quality of achieved results.

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