

Comparison of Funding Corporate Education in the Czech Republic in 2016 and in 2021 during the Covid-19 Pandemic

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Abstract

The paper deals with an analysis of sources of finance for corporate education in the Czech Republic during the covid-19 pandemic in 2021, and compares such concept with conditions in 2016. The research is based on results of two questionnaire surveys. The first survey, where 607 companies were involved, took place in 2016, whilst the second one (with 506 companies participating) in the first half of 2021. Both surveys examined whether different types of funding employee education depend on company size, with two hypotheses being established. The first hypothesis (i.e. Using external sources of finance for employee education depends on company size) was confirmed, as large companies use more external sources than smaller companies. However, the second hypothesis, which was to prove a claim that the share of funding employee education solely from funds, projects, grants and subsidies will have an increasing tendency (when comparing the first and the second period under review), was not confirmed.

Keywords: corporate education, funding sources, human resources, covid-19

Introduction

Growing technical demands of production, opening of new markets as well as competition growth place high demands on companies. Human resources are currently one of the most important factors in competition. "If an organization is to develop in today's highly competitive environment, it cannot do so without ongoing training and development of its employees" (Urbancova et al., 2021).

According to Armstrong (2014), education and development are defined as a process ensuring that an organization has educated, qualified and committed people. It is

desirable that employee education should be seen as an investment that returns to the organization in the form of educated and capable employees. Given the fact that human resources have become the biggest competitive advantage of organizations, Czech organizations strive to create and continuously provide a variety of talent programs to their employees (Vnoučková, Urbancová, Smolová, 2018).

At present, the labour market is going through great development not only with regard to introducing digitization and other trends in Industry 4.0, but also in connection with the situation surrounding the global covid-19 pandemic. According to Beneš (2021), more than half of industrial companies in the Czech Republic are currently facing a shortage of skilled labour, as based on to the latest statistics. It may be assumed that the covid-19 pandemic will further exacerbate this problem. On the other hand, it should be noted that even in the pre-pandemic period, initial employee education did not provide the knowledge and skills expected by employers, and companies could not do without their employees' further education and competence development.

Another reason for educating employees is that their initial education is no longer able to provide grounding for the entire period of their professional career. Denkowska, Fijorek, Wegrzyn (2020) followed the research of Earle (2010) who had shown that innovations are reflected in the knowledge and skills of employees with tertiary education. Denkowska et al. (2020) then proved that innovations and competitiveness depend on the will and skills of workforce to maintain habits of self-studying. The knowledge acquired as a result of formal education has a weaker, although still significant, impact on the level of innovations in EU countries.

"From the viewpoint of organizations, knowledge is the most important intangible resource that can be found in human beings. In line with rapidly changing trends, it is necessary for organizations to focus on implementing an innovative education system and be able to work in accordance with sector expectations leading to knowledge promotion." (Vnoučková, 2017). Also, Fajčíková, Urbancová (2017) looked into evaluating tools for education and development of human resources used in organizations operating in the Czech Republic.

In addition, employee education is also supported within the EU, and a number of tools have been developed to support lifelong learning. The Strategic Framework for European Cooperation in Education, adopted in May 2009, defined values for participating in education to be achieved in 2020. A corresponding proportion rate of adults aged 25-64 to participate in long-term education was set at the minimum of 15%. According to Eurostat, the rate was reported to be at 10.8% in 2019, which was 0.7% higher than in 2014. The best performers were Denmark, Finland and Sweden, where the figure ranged between 25.3% and 34.3%, whereas the worst countries in that respect included Romania, Bulgaria, Greece and Croatia (less than 4%). The Czech Republic recorded 11.1% of people in the above age group engaged in lifelong learning (Eurostat, 2020).

Considering an approach to employee education, it differs not only between individual states, but also between their individual regions. Filippetti, Iammarino, Guy (2017)

discussed regional differences related to the impact of employee education on employment. They focused on the effectiveness of educating and its impact on employment within the northern and the southern regions of Italy. They also addressed differences in the private sector and the public sector and described funding sources.

European Union funds are the main instrument for implementing the European cohesion policy. Interested parties have an opportunity to draw down the funds through individual operational programs. The European Social Fund (ESF) has been supporting employment and human resources development activities since 1957 with the focus on non-investment projects. In the Czech Republic, the funds are drawn through the Employment Operational Program. Its aim is to improve the population's human capital and public administration in the country, also involving the area of further education. In the course of the 2014-2020 programming period, a number of calls directed at employee education were implemented through the program: Development of further vocational education (020), Corporate employee education (043), Education – a common path to development! (060), Corporate employee education II (097), Education – a common path to development II! (110), Age management – a smart change in management, an opportunity for growth (079). (Ministerstvo práce a sociálních věcí, 2020) Another opportunity for drawing down the funds involved POVEZ and POVEZ II programs. Education and development of competencies are also supported in other operational programs implemented in the Czech Republic, e.g. The Rural Development Program, The Fisheries Operational Program and others. A number of funds supporting education in the above programming period were also drawn through Local Action Groups under the LEADER program. Líšková, Klufová, Rost (2019) assessed the LEADER program in relation to the Visegrad Group (V4).

Tomé and Tracz-Krupa (2019) examined experience with drawing down funds from the ESF within the V4 in the 2007-2013 programming period. They state that the ESF is a form of public investment in human resources development using EU funds, and it is also a tool to help the V4 countries and their labour markets develop and lead them to increasing levels of skills. At the beginning of the period, the V4 countries had a good educational base comparable to the EU average. However, vocational training and further education are the areas where large deficiencies were found. Despite some quality problems, Tomé and Tracz-Krupa (2019) view the experience with drawing down the funds as very positive, with greater development and increased skill levels occurring in terms of human resources development.

A large number of companies in the Czech Republic are aware of the importance and need for educating of their employees. However, they do not always have enough of their own financing sources, and it is the drawing down from the EU structural funds (through various operational programs) that can provide them with sources to support educating. Dubel and Pawłowska (2020) deal with the issue of using ESF sources for education.

According to Morley et al. (2016), the amount that Central and Eastern European companies spend on educating of their employees is approximately 4% of the total annual

wage costs. They also remark that while assessing the effectiveness of individual training programs, feedback from line managers is most applied, which is followed by feedback from employees, fulfilment of goals and immediate response to trainings from their participants. The cost-effectiveness of skills development was addressed by Bhattacharya, Gibson, Doty (2005), who found that flexibility of abilities and skills contributes to cost-effectiveness. The findings suggest that investing in flexible skills and employee behaviour will positively affect financial performance of companies.

Urbancová et al. (2021) observed changes that occurred as a result of the covid-19 pandemic. They state that current trends and priorities of human resources for 2021, including an approach to funding, have changed significantly.

Methods and Data

The main objective is to determine whether and to what extent sources of funding related to corporate education differ depending on company size. Thus, the following hypothesis (Hypothesis I) was formed: Using external sources of finance for employee education depends on company size, large companies use more external sources to fund employee education than smaller companies. Furthermore, the research presented here followed results of the research conducted in the second half of 2016, as based on Caha (2017).

The other objective is to compare results of two questionnaire surveys from 2016 and 2021 respectively. The following hypothesis (Hypothesis II) was therefore formed: When comparing the first period (2016) and the second period (2021) under review, the share of financing employee education solely from funds, projects, grants and subsidies will have an increasing tendency. The second hypothesis is based on an assumption that the year 2021 is the end of the 2014-2020 programming period and individual companies had already had enough opportunities to gain experience in drawing down funds particularly from the EU structural funds.

A related research sample encompassed companies of diverse types and eventually amounted to a total of 506. Questionnaire survey results were processed by basic mathematical and statistical methods. To verify dependence of individual factors, calculations in the SPSS program were performed and a chi-square test as well as a sign test were applied. The companies were divided into four groups (categories) according to size, as indicated in Table 1.

Tab. 1: The structure of the research sample

Company Categories	Number of Companies
Micro-enterprises (1-9 employees)	130
Small enterprises (10 – 49 employees)	139
Medium-Sized enterprises (50-249 employees)	108
Large enterprises (250+ employees)	129
Total	506

Source: Authors.

Results

Regarding the individual groups, it was then examined how companies fund educating of their employees, which may be seen in Table 2:

Tab. 2: Structure of financial resources according to company size

	Micro-Enterprises		Small Enterprises		Medium Enterprises		Large Enterprises	
	Number	%	Number	%	Number	%	Number	%
solely from own funds	118	90,8	115	82,7	80	74,1	61	47,3
solely funds from projects, grants and subsidies	1	0,8	6	4,3	5	4,6	10	7,7
mainly from own funds, partly from projects, grants and subsidies	8	6,2	13	9,4	18	16,7	48	37,2
mainly funds from projects, grants and subsidies, partly from own funds)	3	2,3	5	3,6	5	4,6	10	7,8

Source: Authors.

The chi-square test confirmed significant dependence between company size and types of funding employee education (see Table 3). Therefore, Hypothesis I was confirmed.

Tab. 3: Chi-square tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	75.009 ^a	9	.000
Likelihood Ratio	74.085	9	.000
Linear-by-Linear Association	43.812	1	.000
N of Valid Cases	506		

a. 2 cells (12.5%) have expected count less than 5. The minimum expected count is 4.70.

Source: Authors in the SPSS system

Moreover, Hypothesis I could also be verified using a sign test (see Table 4). Statistically, large enterprises significantly more often declare that they mainly use own funds, partly grants, etc. – with 99.9% reliability (+++), but also significantly more often use solely projects and grants and mostly projects and grants – with 95% reliability (+).

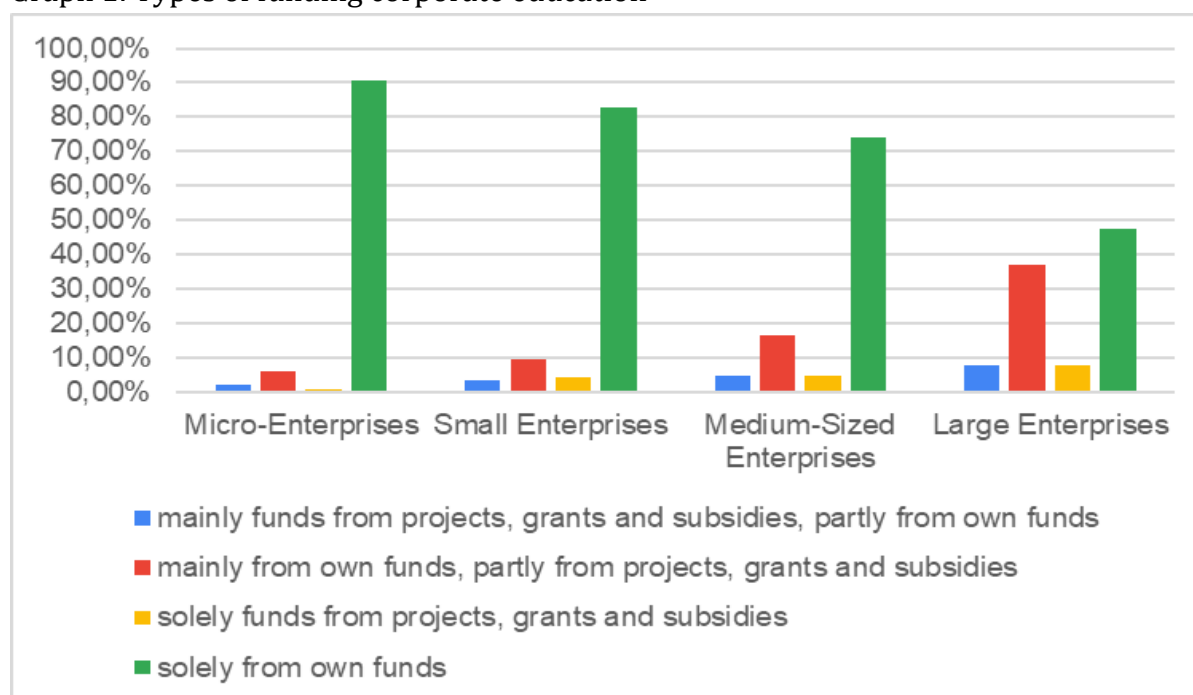
Tab. 4: A sign test

		sources * size Crosstabulation			
		Adjusted Residual			
		Size			
		Micro-Enterprises	Small Enterprises	Medium-Sized Enterprises	Large Enterprises
Sources	solely funds from projects, grants and subsidies	-	0	0	+
	mainly funds from projects, grants and subsidies, partly from own funds	0	0	0	+
	mainly from own funds, partly from projects, grants and subsidies	---	--	0	+++
	solely from own funds	+++	++	0	---

Source: Authors in the SPSS system

Graph 1 shows the structure of resources for funding corporate education in 2021.

Graph 1: Types of funding corporate education



Source: Authors.

Table 5 shows a comparison of shares of individual funding types in 2016 and 2021. In 2021, large companies decreased the share of financing solely from own funds and mainly from own funds. On the other hand, there was an increase in the share of funding through projects, grants and subsidies.

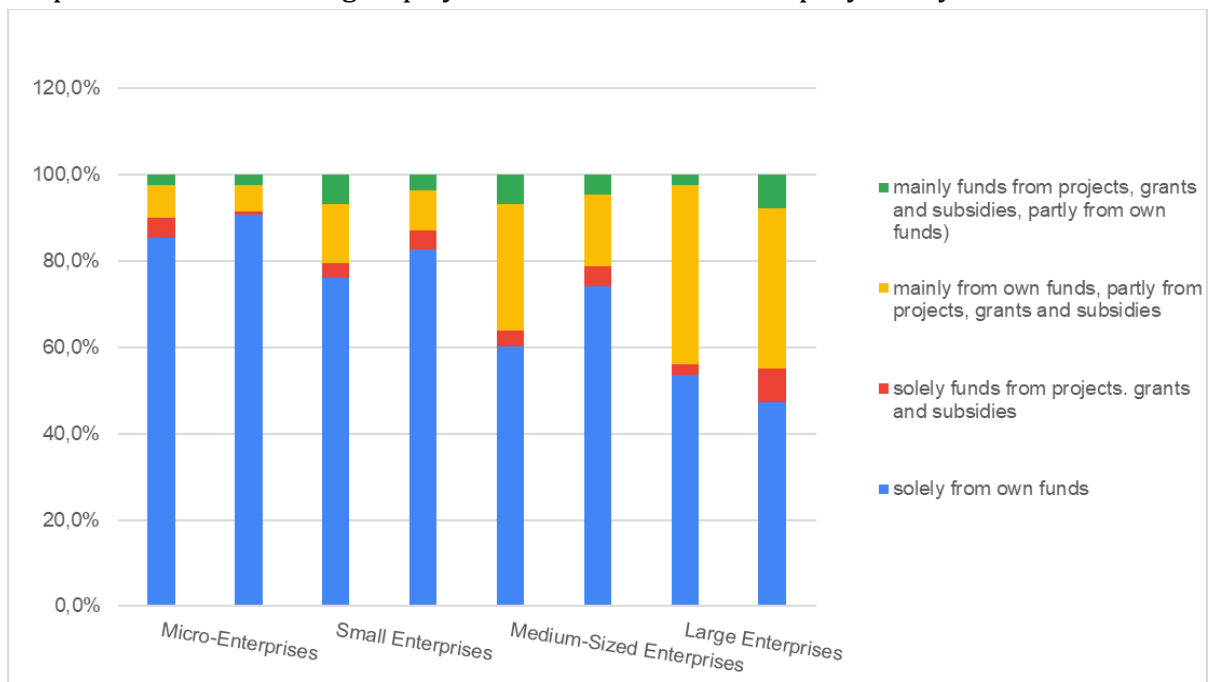
Tab. 5: Sources of funding employee education based on company size -years 2016 and 2021

	Micro-Enterprises		Small Enterprises		Medium Enterprises		Large Enterprises	
	2016	2021	2016	2021	2016	2021	2016	2021
solely from own funds	85,5 %	90,8 %	76,1 %	82,7 %	60,1 %	74,1 %	53,7 %	47,3 %
solely funds from projects, grants and subsidies	4,6 %	0,8 %	3,4 %	4,3 %	3,7 %	4,6 %	2,4 %	7,8 %
mainly from own funds, partly from projects, grants and subsidies	7,6 %	6,2 %	13,6 %	9,4 %	29,4 %	16,7 %	41,5 %	37,2 %
mainly funds from projects, grants and subsidies, partly from own funds)	2,3 %	2,3 %	6,8 %	3,6 %	6,7 %	4,6 %	2,4 %	7,8 %

Source: Author.

As for micro-enterprises, small enterprises and medium-sized enterprises, the share of financing solely from own funds increased in 2021 (when compared to 2016), and yet the share mainly from own funds decreased (even by more than 12% in the case of medium-sized enterprises). Regarding funding mainly from projects, grants and subsidies, the share stagnated (micro-enterprises) and slightly decreased (small and medium-sized enterprises).

Graph 2: Sources of funding employee education based on company size - years 2016 and 2021



Source: Author.

Following from the results illustrated in Table 5 and Graph 2, it can be stated that Hypothesis II was not confirmed. The increase in the share of funds from projects, grants and subsidies occurred only in large companies, whilst the share stagnated or even decreased in other companies.

Discussion and Conclusion

Statistical methods proved that using external sources of finance for employee education depends on company size, where large companies use more of such sources than smaller companies and are able to better cope with the administrative complexity of drawing down individual subsidy titles. There can be several reasons for that. In general, it may be assumed that large companies have better conditions for managing the administrative process associated with drawing down subsidies, both in the form of sufficient personnel and financial coverage. There are companies able to manage the entire course of administration and actual implementation from their own funds, whereas other companies are forced to use external services. In most cases, when drawing down subsidies, eligible expenses are reimbursed only after the project's implementation and completion. Thus, applicants are often concerned that if they make a mistake, the project will not be reimbursed and they will have to bear the costs from their own funds. Also, the situation is certainly complicated by the fact that for most projects, education suppliers must be selected in accordance with the Public Procurement Act. The Czech Chamber of Commerce (CCC), for instance, is aware of that and organizes courses for its members. The CCC therefore enters the role of an applicant and handles the administrative burden, organizing and responsibility for drawing down on behalf of its members.

The objective was also to confirm Hypothesis II: The share of funding employee education solely from funds, projects, grants and subsidies will have an increasing character in view of comparing the first and the second period under review. However, the hypothesis was not confirmed. There are several reasons why the share stagnated or even decreased, with the covid-19 pandemic being one of them. Several forms of aid, e.g. Antivirus A, were drawn down from the ESF, and a combination of the ESF education aid and the Antivirus A aid would mean double funding, which is inadmissible under the Structural Funds programs. This generated a situation where companies had time for educating their employees, but had to carefully consider funds they would use. Another problem related to the pandemic was the inability to organize full-time education. Considering the fact that the Czech Employment Operational Program (EOP) was originally aimed only at full-time education, the official notification of programs where the form was changed to online education had to be made again. Additionally, it even occurred that educating through the EOP could not be implemented at all for a certain period of time. As a result, if companies wanted to educate their employees during that period, they could only use their own funds. Another obstacle to drawing down was de minimis aid indicating that a given entity must not exceed the sum of EUR 200 000 in any three-year period. Apart from educating, the sum (limit) also included aids for job retention, which could potentially lead to meeting the limit. However, that would be assumed particularly for large and medium-sized enterprises.

In conclusion, it can be stated that companies rely mainly on their own sources of finance when funding education of their employees, and there are still large reserves in using funds from programs, grants and subsidies.

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