INFLUENCE OF COVID-19 ON THE COMPANY’S REINVESTMENT IN EMPLOYEE EDUCATION AND TRAINING

Šárka Čemerková
Silesian University in Opava, Czech Republic

Pavla Pokorná
Silesian University in Opava, Czech Republic

Vojtěch Malátek
Silesian University in Opava, Czech Republic

ABSTRACT
This article deals with the results of two independent primary research studies in the field of the reinvestment activities of companies aimed at supporting employee education and training. Attention is focused on the reinvestment activities of companies and the direction of investment funds to individual areas with an emphasis on employee education and training. The article compares the situation before and after the first wave of the Corona crisis in the Czech Republic. Information on the structure and volume of corporate reinvestment is presented, as is information on reinvestment in employee development through selected training methods. The chi-square test was used for statistical analyses.

Keywords: company, COVID-19, employee education, employee training, investment, reinvestment

INTRODUCTION
Making the right decisions in the field of investment and reinvestment activities of a company requires, in addition to appropriate theoretical training, a considerable amount of business experience. The very decision to reinvest a certain part of profit also establishes further decisions about which segments of the company to reinvest in and in what amount. Reinvestment decision-making must consider a wide range of starting points and a number of variables. The area of business finance and profit management may therefore differ (Baumann & Kritikos, 2016).

Reinvestment, i.e., the return of profits from previous successful investment business activities back to the company, is one of the sources of financing for the company’s development which, especially in times of crisis, are more important than ever. Reinvestment also is one of the long-term financial activities of an entrepreneur and, for many companies, represents a basic way for them to grow or renew their business (Okanazu, 2018).

One of the starting points for the company's prosperity is the support and implementation of employee education and training, which is part of broader HR processes. Today, Czech employers are looking for specialists with both secondary education and higher education, but the problem is that the professional and personal qualities of applicants often do not meet the requirements of employers (Koutna & Janicka, 2018). Furthermore, the fourth industrial revolution
also brings some problems to the labor market, especially a severe shortage of quality employees (Kostalova & Bednaríkova, 2019). Employee education and training is a costly process, and reinvestment in this area should be one of the company’s priorities. Enyinda et al. (2019) even stated that employee training and development are the most important areas of human resource management.

The available resources in the literature generally deal with the issue of reinvestment in various contexts, but none of them deals with the assessment of the impact of the COVID-19 crisis on reinvestment activities and the impact on employees associated with it. At present, the whole world is in an unstable environment, so it is appropriate to focus research on changes in the field of reinvestment, the amount of their volume and changes in preferences that can lead to the survival or even development of companies. This article, therefore, contains information on the impact of the COVID-19 crisis on reinvestment activities in the field of education and training of employees in companies in the Czech Republic. In addition, it aims to assess the changes in the company's reinvestment activities due to the COVID-19 pandemic with an emphasis on employee training.

LITERATURE REVIEW - DEFINITION OF REINVESTMENT WITH A FOCUS ON THE EMPLOYEE SEGMENT

The globalization of production and consumption has brought many challenges and opportunities to businesses (Paul et al., 2017). Therefore, businesses have to face these new challenges through investment.

Investment decision-making is an important part of strategic decision-making in any company because new investment projects fundamentally affect future economic results and prosperity (Scholleová et al., 2010). Successful companies regularly repeat investment activities. If profits from investment activities are reinvested in other investments, a cycle is created, which can be described as reinvestment activity. Companies can also direct the generated profit from investment activity out of the company.

Approaches to the issue of reinvestment are different and depend on the authors’ and scientific preferences. Reinvestment of profits can be replaced by external financing, or external sources of financing can be used only as additional financial sources; however, access to bank loans does not affect reinvestment decisions (Johnson et al., 2002). They came to this conclusion after focusing their attention on companies operating in Eastern Europe. In contrast, McMillan and Wooduff (2002) found that there is a link between access to bank credit and reinvestment processes. These authors found positive links in China, Russia, Poland, and Vietnam. Private companies reinvest to a greater extent than companies with state support (Chakravarty & Xiang, 2011).

Lazonick (2014) considered reinvestment from the perspective of corporate finance, i.e., from the point of view of corporate finances - share repurchases and dividend payments. He stated that 449 companies in the S&P 500 index, which were publicly traded from 2003-2012 used 54% of their income to repurchase their shares during this period, almost all through the open market. Dividend payments accounted for another 37% of income. Illés (2016) dealt with the calculation of the rate of return on reinvestment.

Nguyen (2019) stated that small companies in Vietnam reinvested an average of 15% of their total net income per year between 2000 and 2015. Walker et al. (2011) also claimed that finance companies have the highest reinvestment rates across their spectrum (up to 64%), while engineering companies reinvest around 20%. Chakravarty and Xiang (2011) published an overview of reinvestment rates in 36 countries in Central and Eastern Europe and the developing world. For the Czech Republic, the reinvestment rate averaged 13.33% and a median of 0%. South Africa had the highest average value (85.91%) and a median of 100%. Kazakhstan had the lowest average value of reinvestments in the given examined spectrum (only 9.78%). The countries that also had a median of 0% are Azerbaijan, Georgia, Kazakhstan, and Uzbekistan. The authors identified the causes of these differences, such as differences in the protection of property rights, different approaches to external resources, the expansion of private ownership, and relative competitiveness.
A search of the literature showed that each author perceives the issue of reinvestment from the point of view of his specialization, but none of the authors dealt with a comprehensive view of the issue of reinvestment. The entrepreneur (competent manager) can reinvest the profit in one or a combination of selected segments (see figure 1).

The first stage after generating a profit from a previous investment is deciding whether or not to reinvest. In the case of a decision to reinvest, the investment segments will be selected, which may be (i) the marketing activities of the company, (ii) fixed assets, (iii) new business activities, or (iv) employees, etc. If these reinvestment activities are successful and generate additional profit, there may be a recurrence of funds, and the process may be repeated.

All areas of the company are in some way linked to employees. Therefore, employers should learn how to know the requirements and expectations of the potential workforce to be able to develop attractive career opportunities (Safrankova et al., 2020). In the field of recruitment, Haňdiak (2017) highlighted the principle of finding the right person for the right job. Therefore, the performance and growth of each company leads to investment in employees (Dabic et al., 2011). The effects of upskilling...
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through appropriate training are not disputed by many authors (Bassanini et al., 2005; Ballot et al., 2001; Conti, 2005). They agreed that if employees are trained for about 10 hours a year, their productivity will increase by 0.6%. Another example of investing in employees is employee benefits (Leopold, 2010) through which the employer motivates employees to perform better. Motivation is a tonic, as several authors have claimed (Srivastava & Kakkar, 2008; Hitka & Balážová, 2015), which gives additional energy to overcome fatigue, disinterest, and also the tendency to terminate employment prematurely. The biggest challenge of human resource management practice in the Czech Republic is learning how to deal with the potential shortage of qualified and motivated people. Many employers value qualified and motivated people as the most important source of their organizations (Snieska et al., 2020).

Investing in employee education is key to achieving a competitive advantage in a strategic framework. Training positively impacts continuous improvement, though this relationship is partially mediated by the extent of employee involvement. According to Smagina (2020), men consider training and professional development more important than women. Training, employee involvement and continuous improvement—the moderating effect of a common improvement method (van Assen, 2021). Therefore, long-term and continuous investment must be made in the education and development of employees, as it is one of the ways to increase the motivation and qualifications of employees. It is also possible to find the missing workforce in new labor markets by importing foreign workforce or by using robots and artificial intelligence. However, COVID-19 has brought a number of changes to this area as well.

The set of necessary employee knowledge and skills is achieved through the implementation of a group of methods, the choice of which depends on the level of development of the organization, set goals, and competition. Educational methods evolve and adapt to current times. In previous concepts, passive methods such as lectures, seminars, and briefings were mainly used. The development of globalization and competition has brought demands for a higher degree of interaction (model situations or coaching). Accelerators of the application of modern methods are generally crises, the current crisis, caused by COVID-19, not excluding. The resulting pandemic has created the urgent need to develop distance technologies that make it possible to transform education systems and thus develop other educational models based on them (Salakhova et al., 2020).

Many authors and research teams have dealt with the issue of working with employees, more generally with human resources. At the forefront of their interest are many general and partial problems that arise from the current development of society and business. Important platforms include the Cranet Research network (CRANET, 2021); however, no one has yet published the issue of reinvestment in employee training in the context of the COVID-19 pandemic.

This research team, therefore, is seeking an answer to the question: Are there differences in the reinvestment activities of companies in the pre-COVID-19 crisis (autumn 2018, hereinafter referred to as period I) and in the first wave of the COVID-19 crisis (this first wave took place in the Czech Republic in spring 2020, then in the text, it is marked as period II)? In the context of these two periods, the authors specifically sought answers to the following questions: (1) To what extent do companies reinvest? (2) If companies reinvest, in which segments and how much? (3) What is the share of reinvestment in employee education and training? (4) Has the COVID-19 crisis affected reinvestment in methods of employee education and training?

METHODOLOGY

This paper is based on primary data obtained by a research survey conducted in autumn 2018 and spring 2020. When calculating the minimum range of the sample, a confidence factor of 95% was chosen, and the set minimum range was 400 respondents. In the first survey, data were obtained from 576 respondents, and in 2020 from 488 respondents. Respondents (business entities) were selected concerning their size, industry and region of their operation in the Czech Republic so that the distribution of respondents in the sample corresponded to the distribution of business entities according to the criteria in the entire population of business entities in the Czech Republic. The main goal of the research was to obtain data on the reinvestment activities of business entities
operating in the Czech Republic. In this study, the authors have presented the results of research focused on reinvestment in general and on employee-focused reinvestment. The values of these variables are presented - the rate and areas of reinvestment and reinvestment in the educational methods of employees in comparison with these periods.

The research was carried out in the form of electronic surveys. Questionnaires were sent to competent managers of selected companies, and the rate of return reached 46%. The completed questionnaires received were subjected to an optical inspection, with 1.2% of the questionnaires discarded due to incomplete or inconsistent data. The relevant data were transcribed into a data matrix in MS Excel, which was used together with SPSS for statistical analysis.

The total internal reliability was measured using Cronbach's alpha, which had a value of 0.875, while in partial analyses the internal reliability of data ranged around values 0.81 which satisfies the condition for further data analysis (Nunally, 1978).

Basic statistical methods were used to examine the relationships. In addition to descriptive statistics, testing of established hypotheses was performed using the chi-square test. This test makes it possible to confirm/refute the differences between the groups. In the field of behavioral scientists, the chi-square test is one of the most used non-parametric statistical tests, where the null hypothesis assumes that there is no statistically significant relationship between the studied phenomena; i.e., the data come from the same populations (Ramík & Čemerková, 2003). Testing was performed at a significance level of 0.05.

RESULTS AND DISCUSSION

The results of the research have yielded interesting findings that relate to the volume of reinvestments before and after the first year of the crisis. Before the research, it was widely assumed that the ongoing crisis would result in a deep decline in business accompanied by a wide wave of redundancies and thus a significant reduction in the company's profits. This gave rise to the notion that reinvestments from companies would be minimal to zero.

As the obtained data show, the volume of reinvestments did not change statistically significantly during the first wave of the Corona crisis (p-value = 0.18), and companies are still reinvesting. Companies, therefore, perceive the crisis as a suitable opportunity for their development or as a necessity for the survival of the company itself. Other presented results relate only to companies that reinvest at least part of their profit.

Figure 2. Share of Companies Reinvesting Back into the Company During Periods I and II
Source: Authors’ finding
The reinvestment activity in companies also underwent structural changes in the ratio of the profit devoted to the company to reinvestment, see Figure 3. Before the Corona crisis, a total of 37.75% of companies reinvested up to 20% of profits. This is the most frequently used amount of reinvestment.

![Figure 3. The Volume of Reinvestments Before the COVID-19 Crisis (I) and After its First Wave (II)](image)

After the first wave of the COVID-19 crisis, the number of these companies fell to 25.98%. This indicates that more companies would reinvest more of their profit. 29.72% of companies reinvested up to 40% of profit before the Corona crisis. During the first wave of the Corona crisis, the amount of reinvestment rose to 31.03%, which represents the largest number of companies that reinvested in this period. The third-largest volume of companies before the Corona crisis (18.74%) reinvested up to 60% of profit. There was only a minimal increase in volume after the first wave of the crisis (by approximately 1.5%). Nevertheless, this finding can be considered positive from the point of view that almost a fifth of companies reinvest up to
60% of their profit from the previous investment, which represents a significant amount of funds. An even higher volume of reinvestments from profits, up to 80%, was demonstrated before the Corona crisis by 10.24% of companies. After the first year of the crisis, however, reinvestments in this volume increased significantly to 17.24%. This fact indicates a change in the decision-making processes of the company's management in favor of a significant amount of profit for reinvestment. As expected, the fewest companies reinvested more or all of their profits before and during the crisis. The achieved results clearly show the fact that companies under the influence of the COVID-19 increased reinvestment activity and thus used the resulting crises as investment and reinvestment opportunities. Structural changes in the volume of reinvestments were also confirmed by a statistical test (p-value = 0.0003).

Based on the statistical analysis of reinvestments in individual business segments, no significant differences were found in the period before the crisis and after the first wave of the crisis, see Table 1. This table shows the percentage distribution of the total reinvested amount. The concretization of the decision tree from Figure 1 is shown in Figure 4. In this context, it is possible to assume that the reinvestment processes in the surveyed companies are set correctly and proportionally. In this regard, it will be interesting to see how other potential waves of the crisis will be reflected in the reinvestment process. Therefore, further research will be required in the investigated reinvestment processes.

### Table 1. Reinvestment by Segments

<table>
<thead>
<tr>
<th>Segment</th>
<th>Period</th>
<th>0%</th>
<th>20%</th>
<th>40%</th>
<th>60%</th>
<th>80%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing</td>
<td>I</td>
<td>31.73%</td>
<td>49.80%</td>
<td>13.65%</td>
<td>2.81%</td>
<td>2.01%</td>
<td>100.00%</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>31.49%</td>
<td>48.97%</td>
<td>12.87%</td>
<td>4.83%</td>
<td>1.84%</td>
<td>100.00%</td>
</tr>
<tr>
<td>New business activities</td>
<td>I</td>
<td>43.78%</td>
<td>36.55%</td>
<td>14.86%</td>
<td>2.81%</td>
<td>2.01%</td>
<td>100.00%</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>41.38%</td>
<td>39.31%</td>
<td>14.02%</td>
<td>3.45%</td>
<td>1.84%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Employees</td>
<td>I</td>
<td>27.71%</td>
<td>52.21%</td>
<td>15.26%</td>
<td>3.21%</td>
<td>1.61%</td>
<td>100.00%</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>34.25%</td>
<td>45.98%</td>
<td>13.10%</td>
<td>4.37%</td>
<td>2.30%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Fixed assets</td>
<td>I</td>
<td>7.63%</td>
<td>23.69%</td>
<td>27.31%</td>
<td>21.29%</td>
<td>20.08%</td>
<td>100.00%</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>5.06%</td>
<td>29.66%</td>
<td>29.20%</td>
<td>19.31%</td>
<td>16.78%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Other</td>
<td>I</td>
<td>98.39%</td>
<td>1.20%</td>
<td>0.40%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>98.16%</td>
<td>1.61%</td>
<td>0.23%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Source: Authors' finding

In a deeper analysis of the employee-focused reinvestment process, it was found that the vast majority of companies reinvest in employee education (89.47%), implemented through various methods. A closer examination of the educational methods used before and during the first wave of the Corona crisis in the Czech Republic revealed that the vast majority of methods did not change significantly in terms of quantitative use, as shown in Table 2. This can be explained by the fact that the methods used are considered by companies to be good in their practice. Nevertheless, there were changes, namely in the use of video recordings, where we recorded the use of this method in almost double the volume (from 7.82% to 15.38%, p-value = 0.0027), and in instruction, which was used more than 10% more often (p-value = 0.0031). The increase in these methods can be explained by the fact that in the changed conditions of the COVID-19 crisis, there is an increase in business activities, which require the use of fast and convincing training methods, and which also allow bringing the required skills to employees and their immediate implementation. (For example, when introducing new, alternative productions, which had not been used in companies until then.) In the overall evaluation of educational activities, it can also be said that despite the crisis (or precisely because of this), companies have invested in and used educational activities to a greater extent.
Table 2. Educational methods

<table>
<thead>
<tr>
<th></th>
<th>Lecture</th>
<th>Model situations</th>
<th>Coaching</th>
<th>Video</th>
<th>Paying games</th>
<th>Self-education</th>
<th>E-learning</th>
<th>Facilitation</th>
<th>Briefing</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>55.78%</td>
<td>28.91%</td>
<td>32.65%</td>
<td>7.82%</td>
<td>2.38%</td>
<td>41.50%</td>
<td>26.53%</td>
<td>2.04%</td>
<td>35.37%</td>
</tr>
<tr>
<td>II</td>
<td>56.67%</td>
<td>29.74%</td>
<td>32.05%</td>
<td>15.38%</td>
<td>2.82%</td>
<td>41.79%</td>
<td>28.97%</td>
<td>1.54%</td>
<td>46.67%</td>
</tr>
</tbody>
</table>

Source: Authors´ finding

In terms of the total amount of investment in employee education, a partial decrease was recorded (by approximately 5%). The percentage of companies that did not change the amount of reinvestment in education did not change (still approximately 61%).

Figure 4. Reinvestment Decision Tree with Segment Specification
Source: Authors´ finding
At the beginning of the COVID-19 crisis in 2020 (period II in the text), no one was able to accurately predict what changes would occur as a result of the crisis. During the preparation of the second round of research, it, therefore, was based (among other things for comparative reasons) on the same structure of the questionnaire that was used in 2018. However, further developments showed that the pandemic was an accelerator of the digitization of society and its processes, including educational processes. It is, therefore, naturally desirable to supplement the questionnaire with questions related to digitization and online forms of training in the next stages of this research.

The above results show that well-managed companies, i.e., those that reinvest at least part of the previous return on investment, have survived the crisis and are further developing their business. Undoubtedly, long-term investments in employees and their education are among the significant activities that enable them to carry out this practice.

CONCLUSION AND RECOMMENDATION

The contribution of this research is a description and analysis of reinvestment activities of the company and its activities aimed at employee education from the point of view of the theoretical provenance of domestic and foreign authors and presentation of the conclusions of the implemented primary research surveys in the given area. The first of these surveys was conducted in the autumn of 2018 under conditions in the Czech Republic before the Corona crisis. The second research survey was conducted in the spring of 2020 and contained data obtained during the first wave of the crisis.

The share of companies that reinvested their profits back did not significantly change due to the first wave of the COVID-19 crisis in the Czech Republic (almost 90%). However, under the influence of the crisis, companies increased the volume of reinvestment activity and thus used the resulting crises as investment and reinvestment opportunities. Before the COVID-19 crisis, a total of 37.75% of companies reinvested up to 20% of profits. After the first wave of the crisis, the number of such investing companies fell to 25.98%. In this period, the largest number of companies (31.03%) reinvested up to 40% of their profit, in the pre-crisis period companies most often reinvested up to 20% of the profit.

The crisis caused by the COVID-19 pandemic not only has health consequences, but has manifested itself in many other consequences, including financial and economic ones. The results obtained contradict the conclusions of other authors, who have stated that financial crises are associated with large and persistent declines in economic output, investment, and productivity (Hardy & Sever, 2021; Furceri & Zdzienicka, 2012). In contrast, Czech companies did not maintain their original path of growth but sought new opportunities and new paths to growth. The facts found indicate that the current crisis is perceived by companies as different from the typical financial crisis; they see opportunities for a new type of development.

The structure of reinvestment segments remained unchanged due to the first wave of the crisis. Companies directed their reinvestments mainly to marketing, new business activities, tangible assets, and employees, and only a minimum of companies reinvested in other, unspecified areas. In this context, it is possible to assume that the reinvestment processes in the surveyed companies were set correctly and proportionally.

An in-depth analysis of the employee-focused reinvestment process found that the vast majority of companies reinvested in employee training (89.47%) through various methods. From the point of view of their quantitative use, there were no significant changes, with a few exceptions. This can be justified by the fact that the methods used are considered by companies to be good in their practice. Compared to the original state, there was double the use of video recordings, and instruction increased by more than 10%. The increase in these methods can be explained by the fact that in the changed conditions of the COVID-19 crisis, there was an increase in business activities, which required the use of fast and convincing training methods, which also allowed bringing the required skills to employees and their immediate implementation.

The development of the COVID-19 crisis in the world and the Czech Republic shows that it will be necessary to reckon with its long-term operation, which implies the need for longitudinally focused research in the Czech Republic and comparison with companies in the European and world space. The changes in
employee training caused by this crisis can be expected in the future as well. It is desirable to find out how these changes will be oriented, especially so that they can be adequately addressed, especially by business entities and educational institutions that educate future managers. It can be expected that the development of the pandemic will bring about the emergence of new educational methods. Methods that were not yet known before the pandemic or were "in their infancy", will emerge at different stages of development and may more or less influence the development of business processes. The next waves of the pandemic will probably not be identical to the situation at the beginning of the pandemic, so the degree of use of different methods in these waves may differ. It will therefore be necessary to carry out research in the field of employee development education repeatedly.

The information on reinvestments in the field of education, presented in the study, captures only a partial part of this process and only in the Czech Republic. It would certainly be beneficial to perform comparative analyses across the V4 countries, the EU and other areas over a longer time horizon.

ACKNOWLEDGEMENT

This paper was supported by the Ministry of Education, Youth and Sports Czech Republic within the Institutional Support for Long-term Development of a Research Organization in 2022.

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https://doi.org/10.1257/000282802762024539


ABOUT THE AUTHORS

Šárka Čemerková, email: cemerkova@opf.slu.cz

Mgr. Šárka Čemerková, Ph.D. graduated from the Faculty of Science of the Palacký University Olomouc in 1996 in the field of General Education Teacher Training, a combination of mathematics and descriptive geometry. She completed her doctoral stage at the Faculty of Economics of the VŠB - Technical University of Ostrava in 2005 in the field of Systems Engineering. Her research activities focus on business management, especially in the field of business economics and logistics.

Ing. Pavla Pokorná is a Ph.D. student in Silesian University in Opava, School of Business Administration in Karvina. She completed a bachelor’s degree in Business Economics in Trade and Services and a follow-up study in Business. She now focuses his dissertation on reinvestment activities in companies. She teaches small and medium business, business economics, and logistics.

Doc. PhDr. Vojtěch Malátek, CSc. defended his habilitation thesis at the Faculty of Economics of Matej Bel University in Banská Bystrica in 2002 in the field of branch and cross-sectional economics. He has long been involved in teaching sociological and economic disciplines, especially Human Resources and Human Resource Management. In his research and publishing activities, he focuses on the issues of sociology of work, training of managers, and the topic of HRM. He is also involved in education and training in the field of doctoral studies and MBA programs.