

# Human Capital Costs in the Context of Coronavirus Crisis

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**Abstract.** Human capital is an important motor of business performance. In this context, the costs of human capital that the company spends in its efforts to ensure the development and achieve growth in its performance play an important role. However, in times of crisis and decline of production, labor costs that cannot be eliminated become unproductive. The sensitive area is especially area of the wage costs that the company has to pay to employees and thus they represent not only the loss for the company but also the cash outflow. The article maps the influence of this factor on individual branches of the Slovak economy. Using data on the volume of wages paid and estimates of scenarios for the possible development of the coronavirus crisis, it identifies the most vulnerable sectors in terms of unproductive labor costs.

## 1 Introduction

Human capital is an important part of the business economy, and investing in this area of production factors ensures the prosperity of the company. However, with the reduction of corporate production due to the coronavirus crisis, the costs of human capital are becoming an item that reduces corporate profits. A significantly negative feature of these costs is the transformation of a large part of labor costs directly into losses, which further exacerbates the possibility of remediation of damages from the decline in production by enterprises. The high share of labor costs thus becomes a risk factor for the survival of companies. The inability of companies to pay wages can lead to the loss of employees in individual companies. In a broader context, this situation can lead to rising unemployment and, in this context, to further negative effects on the costs economy as a whole.

## 2 The essence of human capital

The OECD defines human capital as the knowledge, skills, abilities and other characteristics of an individual that are relevant to economic activity. [1] From the company's point of view, therefore, human capital is an essential input into production factors in the form of human resources. Exploring this issue is important as good human

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resource management practices can contribute to stabilizing and creating good conditions for maintaining a workforce. [2, 3] By inducing interactions to gather and exchange knowledge, human capital contributes to the growth of innovation. [4, 5] To use human resource management as a tool for performance management, it is important to know the basic principles that allow employees to be involved in these management processes. [6]

The human capital costs can be considered as certain investments that are made by companies to improve human activity. It is especially important to match investments into human capital with the needs of the company and the ability to use human potential. [7] It is inefficient if the company invests in development of employees and then the acquired skills cannot be used by them. On the other hand, it is very important for the company to invest in necessary education, skills and abilities of employees, which are inevitable for the efficient production activity of the company. The company can make these investments in human capital by obtaining it from the external environment (funds spent on acquiring quality employees) or by investing in the internal environment (providing training to employees, incentive programs for employees - wages, benefits). However, these investments can also be seen in the broader context of building an employer brand, which will enable the acquisition of qualified employees for the company. [8]

The immediate picture of investing in human capital in a company are the personnel costs. The advantage of this parameter is the possibility of its unambiguous quantification. Personnel costs represent the evaluation of the labor force as a basic production factor and other costs related to ensuring its use in the transformation process. For effective cost management, it is first and foremost necessary to know them. In the case of personnel costs, we can talk about direct wage costs and other costs related to production workers, other "overhead" employees as well as personnel department operating costs of the. there are mutual interactions in all these groups when implementing the business activities. It is necessary to be aware of the importance labor costs, which can be an important motivating element in increasing the performance of business.

Although the current performance studies point to the growing importance of social processes and the focus on manager-employee interaction [9], the importance of wages as a motivating factor cannot be overlooked. There are also studies confirming the impact of salary on employee satisfaction and loyalty. [10] However, the degree of sensitivity to remuneration can also be perceived in a broader context, as an indicator of the employee's response to various stimuli from the company, for example in the form of training. [11] It should be noted, however, that the different effect in this area will be influenced by the very perception of wages by the individual in the context of other employment benefits. [12] As a starting point can be considered a combination of internal motivation and managerially well-managed management (job identification, remuneration strategies, etc.). [13]

In case of a loss of revenues during crisis, it is possible to reduce or completely eliminate the expenditure of certain personnel costs, such as costs associated with recruiting or employees training. However, such a solution is not possible at all types of these costs. The main problem may be the wage costs paid to employees, which become unused costs if the company does not produce. As it is difficult for a company to keep the work of employees in stock and consume it later, unused (non – productive) labor costs are a serious problem. It is only possible in the short term not to transmit performance shocks to employees, in line with the notion that firms isolate workers from idiosyncratic shocks consistent with the notion that firms insulate workers from idiosyncratic shocks [14] is possible only for a short time period.

### 3 Methodology

Nowadays in the context of coronavirus crisis and its impacts on human capital, the currently emerging problem appears to be the labor costs that companies are forced to pay to the employees regardless of the decrease in their profits and a drop in revenues. The aim of the article is, therefore, to point out the possible effects of labor costs in the event of a decline in production, focusing on individual sectors of the Slovak economy.

As a data source, we used the databases of the Statistical Office SR [15] and the government statement on the termination of the economy. Data on the number of employees and the average salary was examined in more detail. The sectoral structure of average salaries calculated from the data for 2019 was used to assess the situation in individual sectors, provided that this structure has not changed in the following period.

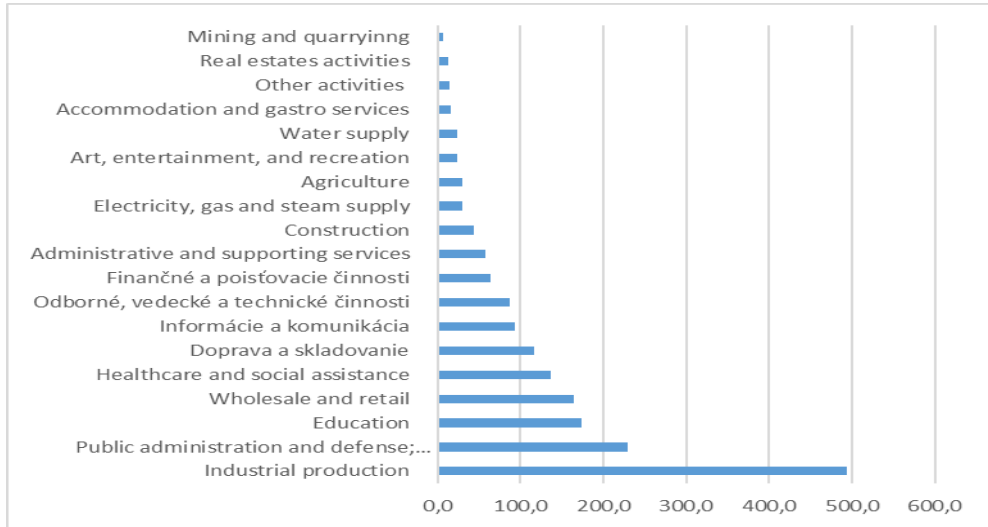
The development of production during the crisis will be estimated based on data publicly presented by government officials and resulting from measures to close selected companies. According to the regulation valid from 16.3.2020 [16], all retail establishments and services were closed except groceries, drugstores, pharmacies, medical device stores, newspapers, post offices, banks, insurance companies, petrol stations, pet shops, and veterinary clinics. Restaurants could have stayed open, but people were not allowed to gather there, but they could have taken takeaway food. International airports were closed, as well as the international train and bus transportation was stopped (except for cargo transports). School facilities, social, cultural facilities, ski resorts, and wellness centers, and aquaparks were also closed. Part of these measures was abolished on 6.5.2020. [17]

### 4 Results and Discussions

The crisis caused by the coronavirus pandemic has dampened the economy. The overall decrease in production is said to be by 30% (according to the statement of Prime Minister in March 2020) [18]. The amount of labor costs is an important factor playing an important role in terms of the survival of vulnerable sectors, which burden their financial management and are a significant component of cash flow outflow.

In the context of revenues drop, the number of wages that were paid even though they did not contribute to ensuring the company's performance can be considered. Therefore it is possible to talk about unused labor costs. Unused labor costs depend on two parameters: the volume of wages paid and the extent of the company's production downtime. The largest volume of unused labor costs can, therefore, be observed, especially in the sectors with the most massive volume of wages paid. (In order to get a picture of the total amount of costs related to employees' wages, it is necessary to add wage levies to the value of wages paid.)

According to the average data from 2019 (Statistical Office of the Slovak Republic, 2020), the most wages paid were in the industry sector, which employed 27% of all employees, and 27% of all wages were paid in it. In second place are the branches of Public Administration, Defense and Compulsory Social Security, which employed 11% of all employees and paid 13% of all wages. The third is the education sector, employing 11% of all employees out of all, and 10% of all wages were paid. In fourth place is the wholesale and retail sector, which employed 10% of employees, to whom 10% of wages were paid. In fifth place is the sector of healthcare and social assistance sector with 8% of employed persons and 8% of wages paid.



**Graph 1** Volume of wages paid in individual branches in 2019 in mil. €

Source: own processing according to the Statistical Office of the Slovak Republic

The second parameter that has already been mentioned, influencing the occurrence of unused labor costs, is production decline. However, not all economic sectors were negatively affected by the crisis. The endangered companies can be divided into primary endangered and secondary endangered. In primarily endangered companies, there is a decline in production due to the closure of facilities by government decision, to ensure the protection of public health. These companies had to cease their activities completely, which meant that no revenues were achieved. In secondary endangered companies, they recorded a decline in revenues due to declining customer demand resulting from their new needs at the time of the coronavirus pandemic. Some companies might also have seen an increase in production volume due to increased customer demand, whether due to the loss of substitute products or purchasing of stocks. The biggest threat of unused labor costs is naturally in companies with the most significant decline in production.

**Table 1.** Non - productive labor costs in the event of a decline in production

	Non - productive labor costs in % of annual wages	
Production decline by	Duration of the decline one month	Duration of the decline two months
10%	0,8%	1,7%
20%	1,7%	3,3%
30%	2,5%	5,0%
40%	3,3%	6,7%
50%	4,2%	8,3%
60%	5,0%	10,0%
70%	5,8%	11,7%
80%	6,7%	13,3%
90%	7,5%	15,0%
100%	8,3%	16,7%

Source: own processing

According to an estimate of a 30% slowdown in the economy over two months, the volume of non-productive labor costs can be expected to amount to 5% of annual wages. The highest value would achieve the costs in the industry sector. According to average wages in 2019, it would be more than 24.7 mil. € (after taking into account levies of € 33.4 million). Non-productive labor costs would represent up to 12.5% of annual wages in enterprises in which there has been a complete closure of operations or a production outage for 1.5 months. According to average wages in 2019, it would be, for example, in the arts, entertainment, and recreation sector, almost 3 mil. € (after taking into account levies 4 mil. €) and in the accommodation sector more than 1 mil. € (with levies of almost € 1.4 million)

## 5 Conclusion

The costs of human capital are an important component of the company's costs. In case of a significant decline in production, there is a non-productive component created, especially in the part of labor costs, which is a loss for the company. In terms of unused labor costs, the most vulnerable sector is the industry. In this sector, a high production outage can be estimated, especially due to the production outage and also the high volume of labor costs. Both of these factors are cumulative, especially in the automotive industry. Businesses that have been closed by government decision, and that have not achieved any revenues for a certain period are also at risk. Compensation provided by the state as compensation for employees' wages can be assessed positively in this situation. This measure will reduce the loss caused by unproductive labor costs of companies and will also improve the cash flow balance.

In terms of human capital costs, not only losses from unproductive labor costs can be perceived negatively, but also costs associated with possible redundancies. This factor would play a greater role in companies with higher wages and higher numbers of employees. Last but not least, a higher number of employees at risk of losing their jobs or a reduction in their income would also have an impact on the macroeconomic parameters of this situation, such as the unemployment rate and purchasing power.

## Note

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