

# Quantifying the impact: How many jobs were saved by government job retention scheme during COVID-19?

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During the sudden and widespread impact of the pandemic, fiscal interventions played a crucial role in facilitating employee retention. The government's "First Aid" measures in Slovakia prevented a more significant contraction in employment among firms that experienced a substantial decline in sales during the crisis. By reducing labour cost and supporting wages, these interventions prevented increase in unemployment and ensured financial stability of workers despite reduced working hours.



Average level of employment experienced a smaller decrease compared to average sales and hours worked in the firms.



"First Aid" focused on preserving employment in firms that faced significant revenue declines and were unable to retain their workforce.



Firms with strong performance during the pandemic witnessed an increase in their employment numbers even in the absence of subsidies.



"First Aid" support packages effectively mitigated a more severe contraction in employment within hard-hit firms and saved at least 59,000 jobs.



The measures are effective in sudden, temporary shocks and can be valuable for future economic crisis.

# Introduction

**COVID-19 has had a severe negative impact on the global economy and labour market<sup>1</sup>.** However, in comparison to the overall output, the effect on employment appears to be less severe, largely due to rapid and widespread fiscal support implemented to preserve jobs<sup>2</sup>. Considering the effectiveness of job retention measures during the pandemic, such measures could prove valuable in addressing future shocks as well.

**In this policy brief, we quantitatively assess the impact of government subsidies (job retention scheme), on firm level employment.** We find that overall, the decline in employment was smaller than the decrease in sales and hours worked during the pandemic. Furthermore, our analysis confirms that the initial policy response, which specifically aimed at safeguarding income and preserving jobs in heavily affected firms has achieved its intended goal and has saved at least 59 thousand jobs.

## Broad picture of labour market during COVID-19

**The initial phase of the pandemic had a disruptive impact on both employment and sales numbers (chart 1 and 2).** The effects, however, has been uneven or asymmetric across sectors. The hospitality sector which was among the hardest-hit sectors globally, experienced sharper declines in labour and sales between 2020 Q1 and 2021 Q1 compared to the manufacturing sector. Nevertheless, the hospitality sector exhibited a swift recovery after 2021 Q1 and even surpassed its pre-pandemic growth rate by 2022 Q1 (chart 4)<sup>3</sup>. The initial decrease in labour in this sector proved to be temporary. It is also worth noting that across different sectors and the overall economy, the decrease in average employment was considerably smaller in comparison to the decline in sales and hours worked (chart 1,2 & 3). This could be attributed to the government measures or directed assistance aimed at supporting job retention during the pandemic.

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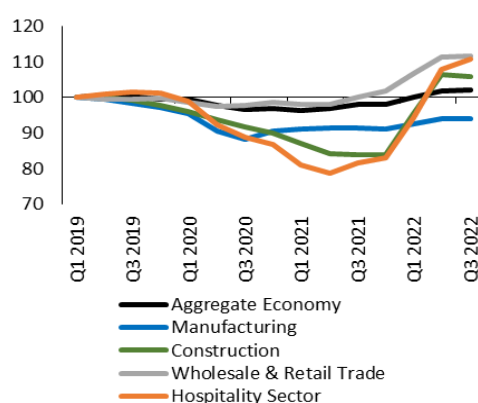
<sup>1</sup> International Labour Organisation. (2020). The impact of the COVID-19 pandemic on jobs and incomes in G20 economies.

<sup>2</sup> Lam, W. R., & Solovyeva, A. (2023). How Effective were Job-Retention Schemes during the COVID-19 Pandemic? A Microsimulation Approach for European Countries. IMF Working Papers, 2023(003)

<sup>3</sup> Pandemic restrictions were officially lifted in 2022 Q1 (February Q1) which possibly had an impact on large increase in employment especially in hospitality and construction sectors during this period.

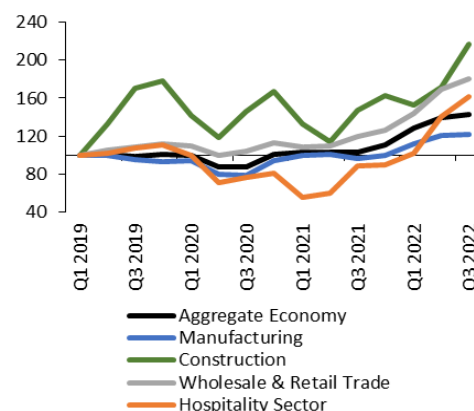
**Chart 1**

Employment across Sectors (Q1 2019 =100)



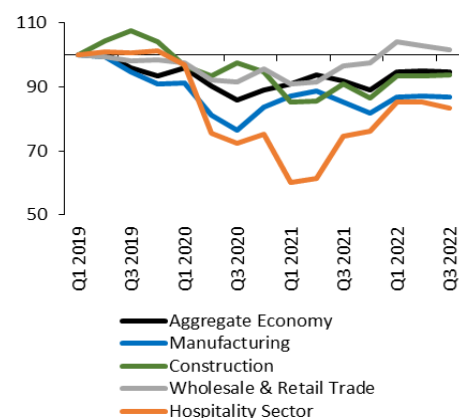
**Chart 2**

Sales across Sectors (Q1 2019 =100)



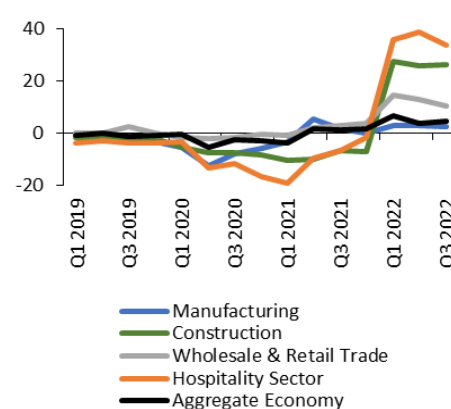
**Chart 3**

Hours Worked across Sectors (Q1 2019 =100)



**Chart 4**

Employment Growth Rate (%)



Source: Quarterly data from Statistical office, NBS calculation

## “First Aid” for job retention

By the end of March 2020, the government implemented various measures to mitigate the economic consequences of the COVID-19 pandemic on jobs and income in Slovakia. One of these measures was the "First Aid" program, which provided directed assistance to employees, entrepreneurs, and the self-employed population. This financial support was disbursed monthly from March 2020 to February 2022, with the exception of August 2021. Different measures were available for established firms, entrepreneurs, and self-employed individuals (table 1). The total amount allocated to the "First Aid" scheme reached approximately 2.5 billion euros, majority of which were directed towards employees in firms<sup>4</sup>. The primary focus of these subsidies was to support employee salaries and preserve jobs. Throughout the period, the hospitality sector received the highest average government subsidy per

<sup>4</sup> NBS calculation using data from Ministry of Labour, Social Affairs and Family of the Slovak Republic

worker compared to other industries (chart 5). In the subsequent section of this brief, we will directly examine the impact of government subsidies on the labour force in firms of varying sizes.

**Table 1**

Government Financial Support Schemes, Target Groups and Condition<sup>5 6</sup>

Scheme	Target Group	Target Condition
1	Employee/ established firms	Employers who were forced to shut down their operations could claim support (80% of salary) to pay their employees.
2	Self-employed	20% drop in Revenue (180-540 euros per employee in support)
3A	Employee	Employers who had to temporarily lay-off workers due to economic conditions (80% of employees average salary in support)
3B	Employee/ established firms	20% drop in revenue for employers (180-540 euros per worker in support)
4A	Self-Employed	210 Euros
4B	Single member private limited liability company	210 Euros

**Chart 5**

Average Subsidy Across Sectors and Aggregate Economy (Euro)



Source: Data from Ministry of Labour, Social Affairs and Family of the Slovak Republic, own Calculation

<sup>5</sup> Buchel, O., Fašungová, L., Hábel, B., Hlavác, M., Komadel, J., & Veselková, M. (2020). First Aid" for Slovakia: Updated report on the economic policy response to the COVID-19 pandemic. Gov. Sk

<sup>6</sup> We use financial support data based on measures 1, 3A and 3B (support to firms)

## Comparison of firms with and without government subsidies

**Firms that received government subsidies experienced a larger decline in sales, employment, and hours worked on average compared to firms without subsidies (Chart 6 and 7).** Even by 2022 Q3, the average employment in these subsidized firms remained below the pre-pandemic level. To be eligible for government subsidies, firms were required to demonstrate a significant drop in revenue and an inability to pay their employees. Consequently, majority of the firms that did not apply for or receive subsidies were the ones that performed relatively better on average during the pandemic and thus did not undergo a contraction in employment.

**However, it is important to note that the hard-hit firms that received government support would likely have experienced an even sharper decline in employment without such assistance.** The subsidies played a crucial role in mitigating the impact and supporting these firms during a challenging period.

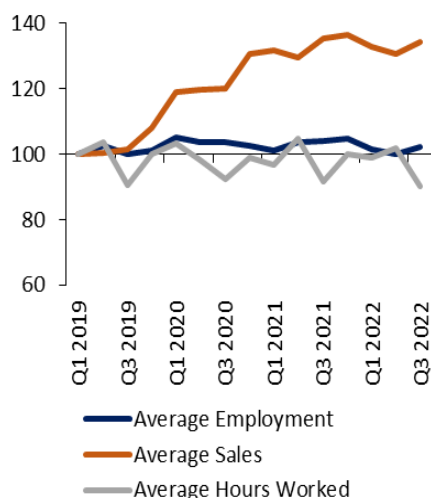
Chart 6

Average Employment, Sales, and Hours Worked in Firms with Subsidies (Q1 2019 =100)



Chart 7

Average Employment, Sales, and Hours Worked in Firms without Subsidies (Q1 2019 =100)



Source: Ministry of Labour, Social Affairs and Family of the Slovak Republic, NBS Calculation

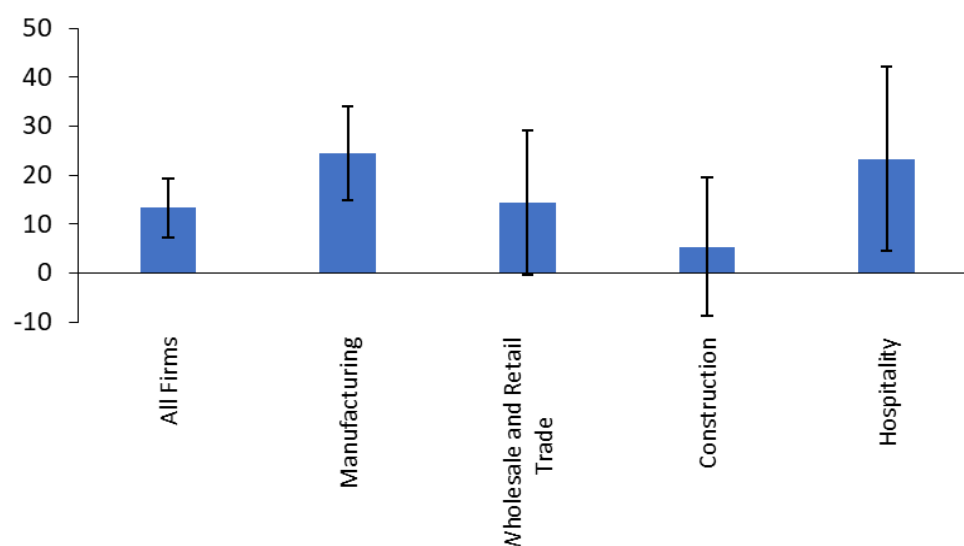
## How effective was "First Aid": Number of jobs saved

**We find a positive impact of government support ("First Aid") on employment for firms that received subsidies when compared to firms with similar characteristics but without subsidies.** To estimate the causal effect of these support measures on firm-level employment, we employ a difference-in-differences approach with multiple time periods<sup>7</sup>. Our dataset includes quarterly employment variables for individual firms (20 and more employees) obtained from the Statistical Office of the Slovak Republic (from 2018 Q1 to 2022 Q3) and monthly data on government subsidies during the COVID-19 pandemic, specifically the "First Aid" support, obtained from the Ministry of Labour, Social Affairs, and Family of the Slovak Republic (from 2020M3 to 2022M2). To conduct our analysis, we transform the monthly firm-level data on "First Aid" into quarterly totals and combine it with the firm-level employment data. Firms that received subsidies are categorized as the treatment group. The control group comprises of firms without subsidies that are matched to each treated firm based on similar characteristics<sup>8</sup>. We compare the employment outcomes between the treatment and control groups over time (2020 Q1 to 2022 Q2).

**We find that the average treatment effect on treated (ATET) is positive and significant for all firms (chart 8).** In comparison to similar non-treated firms, companies that received Covid subsidies experienced a 13% lower decrease in employment. In the manufacturing and hospitality sectors, the treated groups exhibited a 23-24% lower decrease in employment compared to the control group. However, the difference was not statistically significant in the construction and wholesale and retail trade sectors.

**Chart 8**

Average change in employment (%) of firms with subsidies during pandemic compared to similar firms without subsidies



Note: The black bands represent 95% confidence interval

<sup>7</sup> Callaway, B., & Sant'Anna, PH (2021). Difference-in-differences with multiple time periods. Journal of Econometrics

<sup>8</sup> We use Sector (NACE), sales, size (employees) and wage to create a control group using propensity score matching method.

**We implement additional steps to quantify the number of jobs saved through “First Aid”.** The treated group experienced a 5% decrease in employment between 2020 Q1 and 2022 Q1. Based on our estimations, had it not been for the implementation of the “First Aid” measures, severely affected firms would have laid off an extra 13% of their total workforce, which would have accounted for an additional loss of at least 59 thousand jobs<sup>9</sup>. It is worth noting that majority of the jobs saved are found to be concentrated in the manufacturing industry<sup>10</sup>. It is also important to acknowledge the limitation of the sample dataset as it consists only of firms with 20 or more employees. While the ATET is positive and significant for the hospitality sector, our exercise exclusively counts the jobs saved in larger firms within this sector. Given the large share of small firms<sup>11</sup> in the hospitality sector, it can be inferred that possibly a greater number of jobs have been preserved within this sector as well as in other sectors through the “First Aid” measures.

**The “First Aid” measures during the pandemic had a significant impact in labour retention in recipient firms.** Without these measures, hard-hit firms would have laid off substantial number of additional employees. The primary objective of these measures was to provide financial support to employees and preserve jobs in the most impacted firms. Therefore, our findings align with the original goal of these subsidies.

## Conclusion and policy implication

**In summary, our findings indicate that the initial policy response to the COVID-19 pandemic has been effective in preventing painful, sudden unemployment and income loss and hold promise as a valuable tool for future economic shocks in Slovakia.** The policies targeted firms that experienced significant revenue declines and were unable to retain their employees without assistance. Our empirical exercise highlights how “First Aid” played a vital role in helping these firms retain their workers and preventing significant job losses (more than 59 thousand jobs) that would have otherwise occurred.

**It is also crucial to bear in mind that these measures are most useful during sudden and temporary shocks.** During prolonged and persistent economic downturns, there can be negative consequences in preserving jobs through subsidies, as it may hinder necessary reallocation<sup>12</sup>. Therefore, it is important to utilize them as short-term solutions to sudden shocks and supplement them with other policies that focus on restoring regular work hours and facilitating worker reintegration.

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<sup>9</sup> This is equivalent to 3.5% of the workforce in the private sector in 2020 Q1.

<sup>10</sup> Given the highest share in total workforce and high percentage difference between treated and control groups in the manufacturing firms in our estimation, more than 90% of the jobs saved are in the manufacturing sector.

<sup>11</sup> According to Finstat data, approximately 77% of the firms in the hospitality sector have less than 20 employees.

<sup>12</sup> Konings, J., Magerman, G., & Van Esbroeck, D. (2022). The Impact of Firm-level Covid Rescue Policies on Productivity Growth and Reallocation. Centre for Economic Policy Research.

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