

MEASURES SUPPORTING ENTREPRENEURSHIP IN SLOVAK SMES IN THE MOST VULNERABLE INDUSTRIES IN TIMES OF THE COVID-19 PANDEMIC

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Abstract: *The anti-pandemic measures taken to prevent the spread of the coronavirus has slowed down the economic activities of many businesses. Particularly vulnerable are SMEs in industries hardest hit by the crisis. These are SMEs which, due to the nature of their activities, have seen their operations severely restricted or even had to shut down during the pandemic. Key to ensure their survival are government support measures. The aim of the paper is to find out whether there is a dependence between the industry in which SMEs operate and measures to support entrepreneurship in most vulnerable industries during the second wave of the COVID-19 pandemic in Slovakia and to assess whether the measures adopted by the government correspond to those proposed by SMEs in these industries. For the analysis, data from a survey conducted by the Slovak Business Agency in November 2020 on a sample of 1,109 Slovak SMEs were used. We identified the dependence of the above two characteristics, i.e., the industry and the support measures (distinguishing between measures implemented and measures proposed by SMEs) using the statistical analysis. To verify the correlation between the implemented measure and industry, the chi-squared test of independence was used. To determine whether the support measures adopted by the Slovak Government correspond to those proposed by SMEs, we used the correlation analysis, comparison and synthesis. The results confirmed no major differences between the type of industry and measures proposed by SMEs. Some minimal differences were identified in the most vulnerable industries (accommodation and catering). SMEs negatively assess that their views were not sufficiently taken into account when the measures were adopted by the Slovak Government and that they contain a number of exceptions and conditions under which the aid is provided. Irrespective of the type of industry, SMEs particularly call for the reduction or partial remission of levies, increase in the fixed cost allowance and in flat-rate aid calculated on the basis of the decrease in sales.*

Keywords: *COVID-19 pandemic, small- and medium-sized enterprises, most vulnerable industries, measures supporting entrepreneurship, Slovakia.*

JEL Classification: *M20, M48.*

APA Style Citation: Lesáková, Ľ., Vinczeová, M., & Kaščáková, A. (2022). Measures Supporting Entrepreneurship in Slovak SMEs in the Most Vulnerable Industries in Times of the COVID-19 Pandemic. *E&M Economics and Management*, 25(3), 4–18. <https://doi.org/10.15240/tul/001/2022-3-001>

Introduction

The crisis caused by the COVID-19 pandemic has become an unpredictable global risk and is one of the largest global public health crises so far. At the same time, it triggers a serious economic crisis at the country and global levels and can have severe consequences for the future. The primary objective (with a view also to further economic development) must now be the protection of human health. Strict measures were and are necessary to prevent the spread of a disease that does not know any borders in today's globally interconnected world, but which, to an unexpectedly large extent, restrict the functioning of businesses and the economy as a whole, thereby seriously disrupting many value chains. Although it is currently impossible to predict the overall economic impact of the crisis, it is already clear that it is a huge external shock manifesting itself on both the supply and demand sides. On the supply side, businesses are substantially constrained by labour shortages resulting from sickness, incapacity for work due to the mandatory quarantine or the need to care for minor children during school closures. Limited mobility during lockdowns prevents efficient utilisation of available capacity in businesses and leads to interruptions in supply chains. The uncertain economic situation and fear of contagion resulted in the reduced household consumption, which in turn led to a sharp drop in demand, eventually threatening liquidity of businesses. The increased cost of complying with strict hygiene measures, testing of employees and other related regulations have resulted in an unfavourable financial situation of businesses and an increase of unemployment. Restrictions on the operation of businesses, particularly in certain industries such as services, tourism, transport or retail (excluding essential establishments), have in many cases seriously threatened their very existence.

1. Theoretical Background

Kitching et al. (2009) compare the functioning of a company to a state of homeostasis and argue that it is unable to survive outside this state in the long term. Any threat, greater or lesser one, causes a crisis naturally perceived as a menace and requires an immediate response. Thorgren and Williams (2020) add that no matter what the cause, most crises arriving without any warning are difficult to predict, which can lead to their devastating effects on all types of businesses.

The COVID-19 pandemic, with its complexity and severity, has caused and continues to cause economic damages that are unprecedented. The shock brought about by the combination of the above supply and demand side factors was subsequently amplified by financial markets and global trade linkages, thus spreading to most economic sectors (Kraemer-Eis et al., 2020). According to the last macroeconomic forecast (Dujava et al., 2021), the impact of the pandemic on the Slovak economy could be milder in 2021 than in 2020. The GDP growth is expected at 3.7%. However, the real performance of the economy will be adversely affected by inflationary pressures arising from the excess of the global demand over supply and the resulting shortfalls in production. The expected recovery of the Slovak economy may also be slowed down by the ongoing third wave of the pandemic (or possible subsequent waves) and other stringent measures including lockdowns. The economic growth is expected to accelerate in coming years as investments from the EU Recovery Plan ("NextGenerationEU") get underway (European Commission, 2021).

The slowdown in the economic activity resulting from the measures taken causes serious difficulties for businesses in meeting their financial commitments. While, on the one hand, the measures taken and the resulting constraints often induce a dramatic drop in cash flow in a great number of businesses, liabilities related to fixed costs such as rent or interest payments remain payable. Consequently, many normally healthy and thriving businesses face acute liquidity constraints which in many cases may result in insolvency (OECD, 2020b). SMEs, often referred to as a backbone of the economy, are much more vulnerable and less resilient than large enterprises to the kind of abrupt changes and constraints brought about by the COVID-19 pandemic (Corredera-Catalán et al., 2021). Economic shocks accompanying lockdowns hit SMEs much harder (Juergensen et al., 2020; Pedauga et al., 2021). Their impact varies depending on the industry (Wieczorek-Kosmala et al., 2021). According to the OECD study (OECD, 2020a), SMEs represent the majority of businesses in the industries most affected by the crisis, which, according to the study, include transport, manufacturing, construction, wholesale and retail trade, accommodation and catering services, real estate and various professional services. Based on the results of

the research carried out on a sample of 5,800 small enterprises in the US, Bartik et al. (2020) confirm that smaller businesses in industries such as catering and accommodation, cultural and creative industries and personal services are particularly hardest hit by the crisis and the likelihood of their closure increases as the crisis becomes more protracted. Other authors (i.e., Alonso et al., 2020; Betzler et al., 2021) also rank most of these industries among the hardest hit by the COVID-19 pandemic. It is now clear that, both in Europe and the USA, the COVID-19 pandemic directly affected self-employed individuals most than employed individuals and smaller businesses more than large businesses (Belitski et al., 2022). Government measures aimed at maintaining liquidity of SMEs thus appear key to ensuring the economic recovery (Gourinchas et al., 2020).

The onset of the coronavirus pandemic in the Slovak Republic dates back to 6 March 2020, when the first case was officially confirmed. After a several months' slowdown, in mid-August 2020, the number of infected people started to increase again and Slovakia began to face the second wave of COVID-19 (Slovenská sporiteľňa [Slovak Savings Bank], 2021). After the coronavirus outbreak, the first measures to be taken were to prevent the spread of the disease. Individual countries have declared the state of emergency and many have also imposed curfew. The border regimes were reduced. Businesses operating in industries with a higher risk of spreading COVID-19 have been forced to reduce or completely close their establishments. Since the beginning of the pandemic, the Government of the Slovak Republic has adopted a number of measures that can be divided into two groups, namely anti-pandemic and support measures (Belanová, 2020). The anti-pandemic measures aim to protect human health and reduce the direct contact between customers and service providers (measures involve either partial or total closure of establishments) (Veselovská et al., 2021). The support measures are in the form of financial subsidies to promote employment and mitigate the impact of COVID-19. Most of the measures taken in the first and second waves of the pandemic were of a nationwide nature. In addition to them, specific measures were also taken for a limited group of businesses operating in the industries

which are most at risk from the coronavirus pandemic (accommodation and catering, other services, trade, transport).

One of the most affected and most vulnerable industries during both the first and second waves of the pandemic was the accommodation and catering industry (Alonso et al., 2020) which has been subject to restrictions or complete bans since March 2020 (Belás et al., 2021). Accommodation and catering were among the industries which were first affected by restrictions associated with the coronavirus pandemic and, conversely, were the last to be affected by the release of measures (Zisk manažment [Profit Management], 2021). However, other industries have also been affected by restrictions or operating ban of accommodation and catering establishments.

Another industry heavily affected by the pandemic was the other services industry also including culture, entertainment, museums, sport and recreational activities, and personal services such as hairdressing, cosmetics and other personal care services. The rapid onset of the second wave of the pandemic led to a reduction in activity and closure of this group of businesses which had an automatic impact on their revenues.

In addition to the aforementioned industries, trade – especially retail outlets – was also affected by major restrictions and closures. The limited number of people on the premises as well as the rising costs of improving hygiene levels reduced profit of businesses whose operating costs were increasing and revenues falling. The closures had a negative impact on their financial situation (Shen et al., 2020).

As mentioned, during the second wave of the pandemic, both nationwide and specific anti-pandemic measures were taken, partially or completely restricting business activities of SMEs operating in the most affected industries. From 1 October 2020, a state of emergency was declared by the Government of the Slovak Republic, which ended on 14 May 2021. As of 13 October 2020, the ban on assembly of people in groups of more than six began to apply. The nationwide lockdown began on 19 December 2020 and was coupled with a curfew. In February 2021, the so called COVID-automat started to apply in Slovakia. On the basis of the COVID-automat valid for individual districts, both anti-pandemic and support measures are automatically switched on or off.

During the second wave of the crisis, SMEs took a number of measures to mitigate the impact of the pandemic and to support entrepreneurship. The aim of the submitted paper is to determine the dependence between the type of economic activity performed (represented by the industry) and measures to support entrepreneurship in the most vulnerable industries of SMEs in the Slovak Republic during the second wave of the COVID-19 pandemic and to assess whether the support measures adopted by the Slovak Government correspond to the measures proposed (preferred) by SMEs in those industries. The objective was decomposed into three sub-objectives as follows:

1. to identify the relationship between *the industry in which SMEs operate* (the type of economic activity performed) and *implemented measures* put in place to support entrepreneurship in SMEs most vulnerable to the COVID-19 pandemic during the second wave of the COVID-19 pandemic (i.e., determine whether there is a difference between the measures taken in SMEs depending on the industry in which they operate);
2. to identify the dependence between *the industry in which SMEs operate* (the type of economic activity performed) and *the measures* to support entrepreneurship *proposed (preferred)* by SMEs most vulnerable to the COVID-19 pandemic during the second wave of the COVID-19 pandemic in the Slovak Republic (i.e., determine whether there is a difference between the measures proposed by SMEs depending on the industry in which they operate); and
3. to assess whether the support measures adopted by the Slovak Government

correspond to the measures proposed (preferred) by SMEs in the most vulnerable industries.

2. Research Methodology

In October 2020, the Slovak Business Agency together with the Entrepreneurs Association of Slovakia and the Slovak Craft Industry Federation conducted a quantitative survey of SMEs most affected by the COVID-19 pandemic (Slovak Business Agency, 2020). The aim was to find out the opinions of traders, small and medium-sized entrepreneurs in the most affected industries (accommodation and catering services, arts, entertainment, recreation and sport, education and retail) on the anti-pandemic measures taken in the context of the second wave of the COVID-19 pandemic and to obtain information on the preferred support measures. 1,109 respondents took part in the survey. Their structure is shown in Tab. 1. Of the total sample, one third (33%) consisted of entities that carried out their main business activity in the arts, entertainment, recreation and sport which also include, e.g., fitness and wellness centres and clubs. A quarter (25%) of the SMEs surveyed were in catering services and less than one quarter (24%) in retail. The sample was completed by entrepreneurs operating in accommodation services (11%) and in the field of education (the owners of private nurseries, kindergartens and schools) (the survey was conducted in October 2020, prior to the partial lockdown decision).

The sample of SMEs was generated from the database of business entities in the Slovak Republic, taking into account the percentage of enterprises according to the categorization of the main economic activities in the Slovak Republic. The responses of the entrepreneurs were evaluated according to a multi-stage

Tab. 1: Structure of respondents involved in the survey

Industry	Share of respondents (%)
Arts, entertainment, recreation and sport	32.9
Catering	24.9
Retail	23.9
Accommodation	11.4
Education	6.9

Source: Slovak Business Agency (2020)

classification. The questionnaire consisted of two parts comprising two sequential sets of questions: (a) questions focusing on measures implemented in SMEs in response to the second wave of the corona crisis, and (b) questions focusing on measures preferred (proposed) by SMEs to support entrepreneurship. The data collected from the survey of SMEs in the most vulnerable industries allowed to identify the difference between the measures implemented or proposed depending on the industry in which they operated during the second wave of COVID-19. The identification of the dependence of the above two variables, i.e., the industry in which companies operate (the type of economic activity performed) and measures to support entrepreneurship (distinguishing between measures implemented and proposed by SMEs), was carried out by means of the statistical analysis. The IBM SPSS 28 was used to process the data and a significance level of 0.05 was used for testing. To verify the correlation between the implemented measure and the industry, we used the chi-squared test of independence. The Fisher's exact test was used when the conditions were not appropriate for the use of the chi-squared test. In case of rejecting the assumption of independence between the observed values, the strength of correlation was measured by means of Cramer's V.

To determine whether the support measures adopted by the Slovak Government during the second wave of the COVID-19 pandemic

correspond to the measures proposed (preferred) by SMEs in the most vulnerable industries, we used the methods of the correlation analysis, comparison and synthesis.

3. Research Results

The negative impact of the adoption of anti-pandemic measures in the second wave of the COVID-19 pandemic in Slovakia (as of 15 October 2020), i.e., even before the decision on the partial lockdown in Slovakia was taken, was felt by up to 95% of the surveyed companies in the most vulnerable industries. Most of the businesses that experienced significant negative impacts of the measures were in catering services, but also in the arts, entertainment, recreation and sport.

In response to the second wave of the COVID-19 pandemic, SMEs started to introduce a wide range of loss-reducing measures. In the survey, entrepreneurs identified the most common measures implemented in their businesses to reduce losses (Tab. 2).

The most frequent measures taken by the surveyed companies in the most vulnerable industries included adapting the services provided to the new market needs (42%) and investments of their reserves in order to keep the company running (the same 42%). More than a third of the interviewed entrepreneurs (37%) temporarily closed their establishments, either due to the order of the Central Crisis Staff of the Slovak Republic or due to a significant drop in demand and sales. Almost a quarter

Tab. 2: Measures implemented in SMEs in response to the second wave of the COVID-19 pandemic

Implemented measures	Share of businesses (%)
We begin to adopt services to new market needs.	41.8
We invest our reserves from the past to keep the company running.	41.8
Temporary closure	36.8
Some of our employees move to part-time-work/will move in the near future.	23.1
We plan to dismiss employees.	22.5
We negotiate with suppliers to extend our maturities and adjust contract terms.	18.9
We plan to go out of business.	13.8
We negotiate with banks to postpone maturity of loans.	13.7
We negotiate new loans with banks to help us to get through this period.	8.5
Other	5.3

Source: Slovak Business Agency (2020)

(23%) of businesses in the most vulnerable industries already responded to the second wave of the COVID-19 pandemic by cutting their employees' working hours or planned to do so in the near future. A more radical measure in the form of dismissal of personnel was being prepared by almost a quarter (23%) of interviewed entrepreneurs. Approximately 14% of SMEs in the most affected industries planned the worst scenario, i.e., to close their business completely.

The results of the survey provided an overview of the measures taken during the second wave of the COVID-19 pandemic in the most vulnerable SMEs broken down by the main type of economic activity based on the SK NACE classification; the categorization of the main economic activities included (a) accommodation services; (b) catering services; (c) arts, entertainment, recreation and sport; (d) education; and (e) retail.

The identification of the dependence between the industry in which the company operates (performed economic activity) and implementation of the measures to support entrepreneurship in Slovak SMEs, i.e., whether there is a difference between the measures implemented in SMEs depending on the

industry in which they operated during the second wave of COVID-19, was carried out by means of the statistical analysis. The main results of the analysis are presented in Tab. 3.

The highest correlation (moderate) between the measures implemented and industry in which the company operates (the type of economic activity) was reported for the measure "We plan to dismiss employees" (Cramer's $V = 0.288$). The reported dependence can be attributed to differences in the type and character of activities performed by SMEs in the context of the adoption of nationwide anti-pandemic measures. SMEs in accommodation and catering services have been hardest hit by the fall in demand (and hence sales) (Zisk manažment [Profit Management], 2021). This is also documented by the high representation of SMEs in catering services (up to 43.8%) which recorded the adoption of that measure compared to SMEs engaged in economic activities where the measure was adopted to a much lesser extent, i.e., retail (12.5%) or education (14.3%). Similarly, a moderately strong dependence between the adopted measure and type of performed activity was shown for the measure "Temporary closure" (Cramer's $V = 0.253$). This is also confirmed by the highest share of SMEs

Tab. 3: Indicators of correlation between the implemented measures and industry in which the company operates

Implemented measures	Pearson's chi-squared test	Asymptotic significance (2-sided)	Cramer's V
We begin to adopt services to new market needs.	20.979	0.000	0.205
We invest our reserves from the past to keep the company running.	3.263	0.515	
Temporary closure	32.076	0.000	0.253
Some of our employees move to part-time-work/ will move in the near future.	7.014	0.135	
We plan to dismiss employees.	41.510	0.000	0.288
We negotiate with suppliers to extend our maturities and adjust contract terms.	9.985	0.041	0.141
We plan to go out of business.	13.939	0.007	0.167
We negotiate with banks to postpone maturity of loans.	5.051	0.282	
We negotiate new loans with banks to help us to get through this period.	2.894	0.576	
Other	19.660	0.001	0.198

Source: own

reporting this measure in the industry of catering services (46.7%), the lowest representation of this measure can be seen in the retail industry (14.8%).

A moderately strong dependence of the adopted measure and the type of performed activity can be observed for the measure "We begin to adopt services to new market needs" (Cramer's $V = 0.205$). Unsurprisingly, the highest number of SMEs implementing this measure was from the education industry which was mainly related to the shift to online learning (up to 61% of SMEs identified it as a key measure), while it was implemented by almost half as many SMEs providing accommodation services (38.1%).

The lower Cramer's ratio was reported for the measures "We negotiate with suppliers to extend our maturities and adjust contract terms" (Cramer's $V = 0.141$), "We plan to go out of business" (0.167) or "Other" (0.198). These values show that there is only a weak correlation between the above measures and the type of economic activity performed by SMEs, i.e., the share of SMEs that have implemented the measure only slightly varies across the different types of economic activities (there are only small differences between individual industries and the choice of the measure implemented).

For the other measures, the industry in which the company operates does not influence the choice of response, i.e., the dependence between the examined characteristics (the type of economic activity performed and the measures implemented by businesses as a response to the second wave of the COVID-19 pandemic) for the whole population of Slovak SMEs is statistically insignificant.

The results of the analysis show that the highest correlation between the type of economic activity performed and measures taken to mitigate the impact of the pandemic was found for two measures, namely "We plan to dismiss employees" and "Temporary closure". Both measures have been most widely adopted in the industry of accommodation and catering services. It can be concluded that the measures adopted have had the greatest impact on these two industries which are among the most vulnerable due to the nature of their activities. The most frequently adopted measure in all SMEs analysed was "We begin to adopt services to new market needs", for which a moderate correlation was identified between

the examined variables. It was confirmed that the type of economic activity determined possibilities of adapting the supply of services to the changed market situation. For the second most frequently adopted measure "We invest our reserves from the past to keep the company running", no dependence was found between the examined variables, i.e., SMEs, regardless the type of economic activity, implemented the above measures to keep the company running.

In the second part of the survey, entrepreneurs also answered the questions related to their preferred (proposed) measures to support entrepreneurship (Tab. 4). In relation to the restrictions in place, they would particularly welcome "Reduction or partial remission of levies" (63% of SMEs). More than half of SMEs (56%) prefer measures in the form of "Direct subsidies to cover fixed costs". Reduction of levies, or their partial remission, is preferred mainly by entrepreneurs in the field of education, accommodation services and by starting new businesses. The direct subsidy to cover fixed costs would help companies providing catering services the most.

The third most desirable measure that would help entrepreneurs in the current difficult situation is the "Substantial reduction of the VAT rate". Its introduction is advocated by 39% of entrepreneurs. It is followed by measures such as "Increase in the maximum monthly amount of aid for the self-employed and one-person LLCs" and "Increase in flat-rate aid calculated on the basis of the decrease in sales" which have already been adopted by the Slovak Government in the meantime in response to the worsening epidemiological situation.

SMEs involved in the survey also expressed interest in the indirect state support measures in the form of "Changes in the Labour Code in order to increase employment flexibility" (preferred by 16% of respondents) or "Counselling and other services aimed at overcoming the second wave of the COVID-19 pandemic" (11% of entrepreneurs).

The proposed measures reflected the views of businesses, broken down again by the main type of economic activity based on the SK NACE classification, i.e., (a) accommodation services, (b) catering services, (c) arts, entertainment, recreation and sport, (d) education, and (e) retail trade.

Identification of the dependence between the industry (the type of economic activity)

Tab. 4: Measures to support entrepreneurship proposed by SM

Proposed measures	Share of businesses (%)
Reduction or partial remission of levies	63.1
Direct subsidies to cover fixed costs	55.8
Substantial reduction of the VAT rate (e.g., to 10%)	38.9
Increase in the maximum monthly amount of aid for the self-employed and one-person LLCs	28.7
Increase in flat-rate aid calculated on the basis of the decrease in sales	28.4
Increase in the limit for the compensation for employees' salary from the determined amount of 1,100 EUR	20.1
Better availability of interest-free or low-interest loans	19.1
Abolition of regulations that increase employee cost (allowances, employee passports)	18.9
Changes in the Labour Code in order to increase employment flexibility	15.7
Indirect state help (e.g., counselling how to overcome the crisis and other services)	11.1
Other	3.5

Source: Slovak Business Agency (2020)

Tab. 5: Indicators of correlation between the proposed measures and the industry

Proposed measures	Pearson's chi-squared test	Asymptotic significance (2-sided)	Cramer's V
Reduction or partial remission of levies	2.596	0.628	
Direct subsidies to cover fixed costs	13.692	0.008	0.165
Substantial reduction of the VAT rate (e.g. to 10%)	35.664	0.000	0.267
Increase in the maximum monthly amount of aid for the self-employed and one-person LLCs	16.044	0.003	0.179
Increase in flat-rate aid calculated on the basis of the decrease in sales	2.445	0.661	
Increase in the limit for the compensation for employees' salary from the determined amount of 1,100 EUR	6.825	0.145	
Better availability of interest-free or low-interest loans	2.756	0.599	
Abolition of regulations that increase employee cost (allowances, employee passports)	10.043	0.040	0.142
Changes in the Labour Code in order to increase employment flexibility	19.584	0.001	0.198
Indirect state help (e.g., counselling how to overcome the crisis and other services)	5.976	0.201	
Other	0.222 ^a	0.222	

Source: own

Note: ^a Fisher's exact test.

and measures to support entrepreneurship proposed by Slovak SMEs, i.e., finding out whether there is a difference between measures to support entrepreneurship proposed by SMEs depending on the industry in which they operate (the type of economic activity) during the second wave of COVID-19 was carried out by means of the statistical analysis. The main results are shown in Tab. 5.

The order of the chosen measures confirms the business practice (the entrepreneurs' opinions), according to which the main proposed measure is "Reduction or partial remission of levies", however there is no proven difference between the representation of different types of economic activity in the choice of the above measure (as the main proposed measure). Entrepreneurs in all analysed economic activities consider this measure to be crucial for business support.

"Direct subsidies to cover fixed costs" was reported as the second most frequently occurring proposed recommendation. The value of Cramer's coefficient is 0.165, i.e., there is only a weak correlation between the different types of economic activities and the proposed business support measure.

The highest dependence can be observed between the industry in which the company operates (the type of economic activity) and the proposed measure "Substantial reduction of the VAT rate (e.g., to 10%)", where the value of Cramer's coefficient is 0.287. This measure was the most recommended by the representatives of the catering services industry (up to 56% of SMEs), while it appeared least in the proposals of SMEs from the arts, entertainment, recreation and sport industry (23.6%).

In the same way, differences between the industry in which the company operates and the proposed measure to support economic activity can be also seen for the proposal "Increase in the maximum monthly amount of aid for the self-employed and one-person LLCs" (the value of Cramer's coefficient is 0.179). The value of the coefficient for the proposed measure is determined by the different representation of the types of economic activities recommending the measure as well as a higher number of recommending entrepreneurs from the arts, entertainment, recreation and sport industry (39.2%) and a lower share of SMEs from the catering services industry (19.6%).

The choice of the measures "Increase in flat-rate aid calculated on the basis of the

decrease in sales", "Increase in the limit for the compensation for employees' salary from the determined amount of 1,100 EUR" and "Better availability of interest-free or low-interest loans" does not show the statistically significant dependence on the industry, i.e., the differences in the choice of the above business support measures between different types of economic activities are only marginal.

The measures "Abolition of regulations that increase employee cost (allowances, employee passports)" and "Changes in the Labour Code in order to increase employment flexibility" are only weakly affected by the industry (Cramer's $V = 0.142$ and 0.198 respectively).

Concerning "Indirect state help" and "Other", it can be concluded that the industry (performed economic activity) does not substantially affect the choice of responses. The dependence between the characteristics (the industry and proposed business support measures) is statistically insignificant. Concerning the two measures, it can be noted that SMEs engaged in different economic activities recommend similar (the same) business support measures.

Based on the results of the statistical analysis, it can be concluded that the measures preferred by SMEs do not show the statistically significant dependence on the industry in which they operate, i.e., the differences in the choice of the measures proposed by SMEs engaged in different economic activities are only marginal. Moderate dependence was shown only for the proposed measure "Substantial reduction of the VAT rate (e.g., to 10%)" (this was mainly recommended by the representatives of the catering services industry). Regardless of the type of economic activity performed, SMEs consider the following measures to be the most preferred: "Reduction or partial remission of levies", "Direct subsidies to cover fixed costs", "Increase in flat-rate aid calculated on the basis of the decrease in sales" and "Increase in the limit for the compensation for employees' salary from the determined amount of 1,100 EUR".

The support measures approved by the Government of the Slovak Republic during the second wave of the COVID-19 pandemic consisted of both nationwide measures and measures that were specifically targeted at the most vulnerable industries. The nationwide measures include measures to support employment and help entrepreneurs in times

of loss in revenues, rental subsidies, payment deferrals (insurance premiums, taxes, leasing, loans) and other forms of help (Ministry of Economy of the Slovak Republic, 2020).

Targeted nationwide support during the second wave of the COVID-19 pandemic was provided to SMEs under the First Aid+ and First Aid++ programmes. Until the end of June 2021, employers who maintained jobs for one month during the declared state of emergency and for two months after its termination (including in the case of interruption or restriction of their operation on the basis of a decision of the Public Health Authority of the Slovak Republic). This aid was most heavily used by businesses that could not ensure business continuity by means of home office which had the greatest impact on the industries prioritised for aid. More than 80% of the aid went to three industries – trade (34.2%), accommodation and catering (27.2%) and other services (19.4%) (Slovak Business Agency, 2021).

Aid was also provided to the self-employed whose sales fell by at least 20% or who had to discontinue their self-employment on the basis of the decision of the Public Health Authority of the Slovak Republic at the time of a declared state of emergency – they could apply for a contribution to compensate for the loss of income from self-employment following a drop in sales. However, the amount of the allowance is insufficient to compensate for the loss of income, thus entrepreneurs require an allowance and aid increase.

Employers (including the self-employed) who maintained jobs even if their activities were interrupted or restricted during the state of emergency could apply for the allowance in two ways. The first one was reimbursement of the employee's salary at 100% of the total labour costs, up to a maximum of 1,100 EUR. The second one was in a form of a lump-sum contribution to cover part of the labour costs of each employee, depending on the decline in sales (the measure was primarily addressed to entrepreneurs in the industrial sector. The second industry with the highest share of the amount paid out was trade). Similarly, for this form of aid, entrepreneurs request an increase in the limit of the salary compensation from the established 1,100 EUR and an increase in the rates of the flat-rate support calculated based on the decrease in sales.

A special form of aid was the so-called SOS subsidy intended for the citizens who found

themselves in the crisis situation without income during the coronavirus pandemic. This category mainly includes micro or small entrepreneurs. They often work on several projects at the same time or do ad-hoc work. It was possible to apply for the subsidy since October 2020 once the prescribed conditions had been met (the SOS subsidy has been temporarily suspended since July 2021).

In addition to the financial aid that was and can be obtained from the Ministry of Labour, Social Affairs and Family of the Slovak Republic, other forms of financial and non-financial aid were and are offered through other ministries. These include rent subsidies, payment deferrals and other forms of aid. Rent subsidies were provided on the basis of the call published by the Ministry of Economy of the Slovak Republic (2020). It could be applied for, subject to pre-established conditions, up to a maximum of 50% of the rent for the period of hardship.

The Ministry of Labour, Social Affairs and Family of the Slovak Republic, through the Social Insurance Agency, allowed employers to postpone the payment of social insurance contributions. The deferral of employer's levies applied to those businesses whose net sales and business income had fallen by 40% or more at the time of the restriction or interruption of operations. It was also possible to apply for tax, lease and loan deferrals. The option to defer loan or lease instalments for up to 9 months mainly concerned SMEs.

During the second wave of the COVID-19 pandemic, SMEs could also take advantage of soft loans provided by the Slovak Guarantee and Development Bank and Eximbanka. The Slovak Investment Holding has also become involved in helping this segment of enterprises by providing financial institutions with the portfolio guarantee for loans granted to SMEs affected by the corona crisis (the so-called "anti-corona guarantee") (Ministry of Finance of the Slovak Republic, 2021).

In addition to the above nationwide measures, specific support measures targeted at businesses in the most affected industries should also be mentioned. In particular, enterprises providing accommodation and catering services were able to benefit from the funds allocated by the Ministry of Transport and Construction of the Slovak Republic, subject to the fulfilment of specified conditions. The first

stage of aid from the Ministry of Transport and Construction of the Slovak Republic for businesses operating in tourism and catering establishments was launched in December 2020. All establishments meeting predetermined conditions, i.e., they were not in arrears with social insurance payments, did not go into liquidation, had settled their financial obligations towards the state budget, did not request or draw funds from the EU or any other state administration body, were eligible to apply for the aid. At the same time, they had to meet the condition of a decrease of net sales by more than 40% compared to the same period in 2019. The maximum amount of aid granted to one entrepreneur could not exceed 200,000 EUR in accordance with the rules on the minimis aid. Eligible applicants were catering and accommodation establishments. The second stage of aid from the Ministry of Transport and Construction of the Slovak Republic was based on the same principle with the proviso that businesses did not have to have fulfilled their obligations towards the social and health insurance agencies. The second stage of aid also covered those establishments set up between the first and second waves of the pandemic, i.e., between 1 April 2020 and 31 August 2020.

The targeted support of businesses in the other services industry started in November 2020 when the Ministry of Investments, Regional Development and Informatisation of the Slovak Republic launched a call for the support of culture, arts and creative industries. From December 2020 until the end of 2021, the entrepreneurs operating in the cultural and creative industries could apply for a subsidy aimed at rescuing businesses in that industries and providing them with funds to avoid insolvency. During the second wave of the pandemic, the Ministry of Culture of the Slovak Republic provided a number of support schemes to businesses operating in cultural and creative industries. The project entitled "Reducing the economic impact of the COVID-19 pandemic" provided the subsidy to individuals and natural persons – entrepreneurs. The subsidy was provided through the relevant minimum aid scheme in accordance with specific legislation and eligible applicants could apply for it from December 2020. The applicant had to use the grant to cover current expenses related to the continuation of activities in the cultural and creative industries.

It can be stated that the government's nationwide and specific support measures helped SMEs maintain employment and partially cover revenue shortfalls. However, they contained a number of exceptions and conditions of granting, e.g., a drop in sales by a specified % compared to the same period, zero arrears with social insurance payments, settled financial obligations towards the state budget, zero absorption of funds from the EU or other state administration bodies, etc.

SMEs were negative that their views were not sufficiently taken into account when adopting the measures. They understood the importance of the anti-pandemic measures taken to protect public health, but were critical of the government's unclear and late communication and many conditions under which financial support was provided (Slovak Business Agency, 2021). Many measures were taken late and were ineffective due to a number of exemptions. Entrepreneurs would appreciate fewer exemptions and simpler conditions. Many SMEs did not even apply for support, mainly because they did not meet the eligibility criteria or its amount "was not worth the amount of paperwork and the threat of sanctions" (Slovak Business Agency, 2021). It is the bureaucracy involved in the administration of aid that has discouraged many SMEs from applying for support. SMEs in particular are eagerly awaiting the forthcoming comprehensive compensation act. However, its proposal, on the basis of which entrepreneurs should be reimbursed for the accounting loss for 2020 and which would also replace most of the current support measures (except for contributions to employees' wages), is insufficiently communicated and there is no serious discussion on its content.

Research to date does not yet allow for a comprehensive assessment of the effectiveness of government measures aimed at helping SMEs cope with the negative consequences of the COVID-19 pandemic. Some studies show that the government COVID-19 mitigation measures taken so far seem to be successful in the support of SMEs, especially in maintaining liquidity and reducing the number of job losses. However, some weaknesses of the implemented support schemes have also been identified. Belghitar et al. (2022) found some unfair regional imbalances in the government support provided in the United Kingdom and they also suggest

that the schemes and interventions are too general and fail to target those businesses that deserve support and need help the most. The study of Lu et al. (2021) conducted in Chinese SMEs confirms the need for differentiated government policies based on the industry sector characteristics. The results of the OECD analysis (OECD, 2021) show that the range of measures taken to support entrepreneurship during the corona crisis varied from country to country and policy responses were highly specific according to the national economic and public health context. Differences in approaches taken by various countries indicate that, for example, the size of the fiscal impulse in Germany was significantly higher than in other countries. Italy and to a lesser extent the UK and France have heavily relied on providing loan guarantees. The OECD analysis also supports the results of our research and highlights, *inter alia*, that the policy support should be delivered to SMEs faster by simplifying access and ensuring effective digital delivery systems and it should in particular focus on viable existing companies.

Conclusions

Among all industries, the second wave of the pandemic affected most businesses operating in the accommodation, catering and other services industry due to the reduced mobility of people. The results of the analysis confirm that there are no major differences between the type of economic activity performed and measures proposed to mitigate the impact of the COVID-19 pandemic on SMEs in the most vulnerable industries (no strong dependence is shown), *i.e.*, businesses in the given industries prefer (propose) approximately the same measures. Some minimal differences are determined by the nature of SMEs' activity in the most vulnerable business industries (accommodation and catering).

To mitigate the impact of the COVID-19 pandemic, the Slovak Government approved a number of nationwide as well as specific financial support measures during its second wave. Financial support measures (subsidies and allowances) implemented by the various ministries have made it possible to obtain funds to support employment or help with income shortfalls. Several of them were specifically targeted at the reimbursement of fixed costs, increase in the maximum monthly amount of aid

for the self-employed and one-person LLCs, as well as an increase in the rates of the flat-rate support calculated on the basis of the decrease in sales, better availability of interest-free or low-interest loans, or changes in the Labour Code to increase employment flexibility.

In connection with the introduction of the anti-pandemic measures during the second wave of the COVID-19 pandemic, many entrepreneurs expected much more help from the state. The results of the survey indicate that the state aid fell far short of compensating Slovak businesses for the drop in sales. For almost half of the enterprises surveyed (49%), the drop in sales was significantly higher than the aid provided by state. The worst situation was reported among businesses in the catering industry where more than half (65%) experienced a significantly higher drop in sales compared to the state aid. The support provided so far has been able to fully (or at least partially) compensate for the loss of sales caused by the pandemic and subsequent adoption of the anti-pandemic measures for about a fifth of businesses (19%).

On a positive note, compared to the first wave of the crisis, during the second wave specific support measures were also targeted at SMEs in the most vulnerable industries. Although a number of the measures helped mitigate the impact of the corona crisis on this group of SMEs, they were not able to compensate for the loss of sales caused by restrictions or temporary closure of establishments. Irrespective of the type of economic activity performed, entrepreneurs call, in particular, for the reduction or partial remission of levies, increase in the fixed cost allowance and in the flat-rate aid rates calculated on the basis of the fall in sales.

It appears that the COVID-19 pandemic will have a longer duration and therefore the impact of the pandemic on SMEs operating in the most vulnerable industries needs to be taken into account. Their survival will depend in particular on the quality and, above all, the speed with which the anti-crisis measures are taken. As there are differences between industries in how businesses have been affected by the corona crisis, it will gradually be necessary to shift the focus from measures aimed at the immediate impact of the pandemic shock to measures with longer lasting positive effects on the revitalisation and growth of SMEs that have

managed to survive, taking into account current opportunities, challenges and specificities of different types of businesses in this sector.

The main theoretical contribution of our paper is the identification of the dependence between the type of economic activity performed (the industry in which companies operate) and measures to support entrepreneurship in SMEs most threatened by the COVID-19 pandemic during the second wave of the corona crisis in the Slovak Republic. From a practical point of view, it can be considered beneficial to assess whether the support measures adopted by the Government of the Slovak Republic corresponded to the measures preferred (proposed) by SMEs in the most endangered sectors. The fact that we only focused on SMEs in the most endangered sectors in the Slovak Republic when identifying the dependence between the type of economic activity performed by SMEs (the industry in which companies operate) and measures to support entrepreneurship can be considered as a limitation of our paper. In the future, we therefore want to focus on SMEs in all sectors of the national economy on the basis of the SK NACE classification. A comparison of the results of the analysis aimed at establishing the relationship between the type of economic activity performed (i.e., the industry in which companies operate) and business support measures in the most vulnerable SMEs sectors in the international context could also be a subject of a separate future research. When comparing the measures in this way, it will also be necessary to take into account a number of factors, namely the nature and specificity of individual economies, their economic development level, the quality of policy decisions and the speed and scope of the anti-crisis measures taken.

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