

THE IMPACT OF THE CORONAVIRUS PANDEMIC ON THE TERRITORIAL CHARACTERISTICS OF HUNGARIAN SMES (SPECIAL REGARDS TO TOURISM)

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Citation: Kincses, A., Tóth, G., Jeneiné, H.E.G., & Péntzes, J. (2021). THE IMPACT OF THE CORONAVIRUS PANDEMIC ON THE TERRITORIAL CHARACTERISTICS OF HUNGARIAN SMES (SPECIAL REGARDS TO TOURISM). *GeoJournal of Tourism and Geosites*, 39(4spl), 1483–1487. <https://doi.org/10.30892/gtg.394spl19-792>

Abstract: The study highlights the economic importance and role of the European and Hungarian SMEs (micro, small and medium-sized enterprises) in reducing territorial inequalities, and in contributing to regional development and gives an overview of their basic features and characteristics. In the preparation of this paper, we have relied on specialist literature and the data available on the website of Hungarian Central Statistical Office. During the 2008 crisis, real estate, real estate renting, computer and business and business support services, trade, construction and manufacturing, and automotive were the big losers. The economic sectors most exposed to the effects of the 2020 health crisis were the so-called IRS sector. The districts most affected by the health crisis were the Hungarian districts most visited by domestic and foreign tourists, namely Lake Balaton, Bük-Sárvár, Sopron-Fertő, Győr-Pannónhalma, Mátra-Bükk, Debrecen and its region.

Key words: SME, crisis, vulnerable regions, Hungary, coronavirus, tourism

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INTRODUCTION

Promoting SMEs in the EU (European Union) has been a priority since the mid-1980s. Official Community documents as well as recommendations and the policies in individual Member States emphasise that SMEs need special attention and help to overcome the competitive disadvantages vis-à-vis large companies. SMEs adapt more easily to changes, make better use of flexible working, change activities more quickly, provide more personalised and differentiated services to their customers, are more risk-taking, innovative and open to new skills and competences than large companies. They play a prominent role in employment and can also be more effective in job creation than their larger competitors, and are significant in closing the productivity gap between regions and areas (Floyd and McManus, 2005; Páger et al., 2019, Laut et al., 2021). It can therefore be concluded that “small enterprises are a key source of innovation, growth and job creation” (OECD, 2014). To understand the situation of European SMEs, including domestic enterprises, it is necessary to clarify the definition of SMEs. According to the European Commission’s recommendation, the population of SMEs comprises three categories of enterprises, namely micro, small and medium-sized enterprises. The official European definition of SMEs considers three different factors (Table 1) the level of employment, the level of net turnover and the balance sheet total of the company (European Commission, 2021).

Table 1. Definition of SMEs (Source: Commission of the European Communities, 2003)

Company category	Staff headcount (persons)	Net turnover (million EUR)	Balance sheet total (million EUR)
Micro enterprise	0 – 9	0 – 2	0 – 2
Small enterprise	10 – 49	2 – 10	2 – 10
Medium enterprise	50 – 249	10 – 50	10 – 43

MATERIALS AND METHODS

In the preparation of this paper, we have relied on a variety of sources of information. Firstly, we have reviewed the specialist literature regarding to small and medium-sized enterprises, effects of COVID-19 pandemic on spatial processes

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of Hungary and crisis management strategies of Hungarian government. Secondly, we have analysed the data available on the website of Hungarian Central Statistical Office to small and medium-sized enterprises and changes in the IRS sector

RESULTS AND DISCUSSION

Position of SMEs in the European Union and Hungary

In 2020, based on the average of the 27 EU Member States, SMEs in the non-financial sector accounted for 99.8% of all businesses, employed nearly two-thirds of the workforce and contributed just over half of gross value added. These proportions have changed little or not at all since the early 2000s. (Table 2) Within all enterprise size categories, micro-enterprises are the most represented (93.3%), but their value-added output is only 18.7%, but their contribution to employment is significant, providing employment for almost 30% of the employed. The basic structural characteristics of SMEs in Hungary have changed only slightly in most sectors (Table 3). As in most European countries, their operations are characterised by high labour and low capital intensity, and their share in employment is higher than in net sales or income generation (Kovács et al., 2017). The number of people employed in Hungarian SMEs is slightly above the EU average, but their gross value added is below the EU average. On the other hand, the average productivity of SMEs - gross value added per employee (19,800 EUR in 2020) - is well below the EU average of 40,000 (European Commission, 2021). The following section briefly describes the most serious effects on SMEs of each of the crises - the financial and capital market crisis of 2008 and the current pandemic (hereafter referred to as the health crisis). Since the so-called crisis sectors, which affect a large number of SMEs, are geographically concentrated, it is also important to examine which regions are vulnerable for SMEs, in order to map the catching-up potential of each region. To this end, we will take stock of how the health crisis has shaped the scope of vulnerable regions.

Table 2. Key indicators for European enterprises in the non-financial sector, 2020 (by headcount category) (Source: Own editing based on Eurostat estimates)

Characteristics	Micro	Small	Medium	Total SMEs	Large enterprise	Total enterprises
	enterprise					
Number of enterprises	21 044 884	1 282 211	199 362	22 526 457	40 843	22 567 300
Share in total (%)	93,3	5,7	0,9	99,8	0,2	100,0
Gross value added (million Euro)	1 179 476	1 071 196	1 087 613	3 338 286	2 956 544	6 294 829
Share in total (%)	18,7	17,0	17,3	53,0	47,0	100,0
Number of persons employed	36 988 539	25 313 006	20 130 548	82 432 093	44 358 284	126 790 377
Share in total (%)	29,2	20,0	15,9	65,0	35,0	100,0

Table 3. Key indicators for enterprises in Hungary, 2020 (by headcount category) (Source: Own editing based on HCSO preliminary data for 2020)

Enterprise size	Enterprise			Number of persons employed			Gross value added		
	number	Index 2020/2019	Share in total (%)	number	Index 2020/2019	Share in total (%)	Billion HUF	Index 2020/2019	Share in total (%)
Micro-enterprise	814,418	101.6	95.7	1,252,570	99.1	39.2	6,500,987	106.4	24.5
Small-enterprise	30,447	94.9	3.6	576,746	94.7	18.0	4,322,232	97.9	16.3
Medium-enterprise	4,875	94.1	0.6	486,870	95.2	15.2	4,787,950	102.1	18.1
Total SMEs	849,740	101.3	99.9	2,316,186	97.1	72.4	15,611,169	102.6	58.9
Large enterprise	1, 007	96.5	0.1	882,708	96.8	27.6	10,884,101	99.6	41.1
Total enterprises	850,747	101.3	100.0	3,198,894	97.1	100.0	26,495,270	101.4	100.0

The impact of crisis on SMEs

SMEs are severely affected by the global crises because (the 2008 financial and capital market crisis and the 2020 health crisis) they are particularly vulnerable for a number of reasons: their small size means that they cannot further reduce their employment and activities; their financing structure and capitalisation are weak; and their credit rating is low or non-existent. They are highly dependent on external financing, which is limited. SMEs in global value chains are even more vulnerable, as they often bear the burden of large firms (OECD, 2009). A good example is the financial and capital market crisis of 2008, which caused global gross domestic product (GDP) growth to slow from 5.4% in 2007 to 2.9% per year, turning into a recession of 0.5% in 2009. In developed countries, GDP fell by 3.4% on average during 2009. The volume of world trade fell by 10.8% in 2009, the sharpest fall since World War II. The low point for global economic performance was reached in the second quarter of 2009, but from then on, the stimulus effect of the crisis measures began to be felt, with the second half of the year showing signs of recovery. In 2010, global economic growth reached 5.1%, but the rate of recovery was lower in developed countries (3%) than in developing countries (7.4%) (Matolcsy, 2012).

In terms of the capital market, the fall in demand had the strongest impact on the performance of SMEs in 2008. The situation was aggravated by longer payment terms and an increase in late payments, which was the second largest source of working capital problems besides the fall in demand. The contraction of external sources of finance has also increased these problems, which has particularly affected SMEs that have a high proportion of their loans in working capital financing (Szabó and Morvai, 2010). In terms of the sectoral distribution of Hungarian enterprises during the financial and capital market crisis, data from the HCSO (Hungarian Central Statistical Office) show that most enterprises were operating in the aggregate sector of real estate activities, real estate renting, computer services and services auxiliary to financial and business activities. This was followed by trade, then construction and manufacturing. These were the most populous

sectors, accounting for nearly three quarters of all enterprises. SMEs in these sectors were the hardest hit by the fall in international and domestic orders. An example is the domestic automotive industry, as it is a highly export-oriented sector; the difficulties in selling goods in Western Europe were almost immediately reflected in the order books of Hungarian companies.

The decline in the domestic automotive centres – West Transdanubia (Győr) and Central Transdanubia (Esztergom) – was more pronounced. The difficulties were compounded by the fact that of the 75 000 people employed in the sector (in 2008), no more than 15 000 worked in final product manufacturing, the majority in component production. In addition, few of the companies in this sector have diversified production, most of them being suppliers to and dependent on orders from a single large manufacturer (Neumann and Boda, 2010, p. 5). The crisis management strategies of countries are largely determined by the size of their available reserves. Some countries have introduced crisis management packages that combine, in varying proportions, demand stimulus, credit enhancement - including bank recapitalisation - and labour market measures. These interventions also addressed the financing problems of SMEs in most countries. In Hungary, measures have focused on access to finance, launching loan and guarantee programmes, expanding existing schemes, introducing investment support measures, and encouraging private and venture capital investment (OECD, 2009). Since the summer of 2010, new directives have been issued under the Action Plans (June 2010 Action Plan I. The Action Plan consisted of two parts: firstly, it explained the architecture of the new economic system (tax system) and secondly, it set out the mutual responsibility. Action Plan II focused on three areas: a fair distribution of the public burden, job creation and cutting pointless red tape and bad rules) to improve the situation of SMEs.

The origin of the coronavirus pandemic declared by the World Health Organization on 11 March 2020 was different from that of previous crises (Kincses and Tóth, 2020). It has challenged and continues to challenge society and the economy, including the domestic SME sector, in an unprecedented way. As a result of the restrictive measures introduced from March 2020 and the resulting fall in demand, domestic GDP fell by 13.6% in the second quarter of 2020 compared to the same period of the previous year. The pandemic has dampened the performance of most sectors (Nyikos et al., 2021), and its globalisation has created disruptions in global production and distribution chains and labour markets. External trade in services has declined much more than trade in goods, with the last time the surplus was lower than in 2020 in 2013. Tourism and transport services turnover fell the most, the latter mainly due to a decline in air transport services (HCSO, 2020).

In 2020, the annual economic contraction was lower in Hungary (-5.0%) than the EU average (-6.2%). The measures in the Action Plan for Economic Recovery and Restart (The Economic Recovery Action Plan was announced by the Hungarian Government at the beginning of February 2021 in three phases, aiming to support the recovery of the economy, including the domestic SME sector, through various economic stimulus and demand stimulating instruments) are aimed at businesses to help counter the devastating effects of the crisis, which is particularly crucial for SMEs to survive and avoid bankruptcy. GDP volume in the third quarter of 2020 was 11.4% higher than in the previous quarter, and in the fourth quarter it expanded by 1.1% compared to the third quarter. Among industry and services, information and communication contributed the most to growth, and trade also grew significantly. Maintaining or even enhancing growth is an important function of the modern state. Since growth at the national level is derived from the development of regions, research has gradually shifted from the national economy to smaller geographical units, regions, agglomerations and cities, where externalities can be better captured, in order to understand the origins of growth (Szerb et al., 2019; Aktybayeva, 2020).

Table 4. Employment in the IRS sector and gross value added generated by identified vulnerable districts, 2020 (Source: Own editing based on HCSO data)

District	Share of employed in IRS sectors	Share of gross value added generated in IRS sectors	Group*
Balatonfüred District	26,46	19,38	3
Bélapátfalva District	20,26	17,42	3
Budapest 5 th District	22,50	10,02	3
Budapest 7 th District	22,49	14,19	3
Fonyód District	17,16	12,14	3
Gárdony District	19,17	11,38	3
Gyula District	15,39	11,33	3
Keszthely District	25,05	19,53	3
Kőszeg District	22,39	16,34	3
Siklós District	18,57	13,85	3
Siófok District	22,51	19,49	3
Sümege District	15,29	15,53	3
Szécsény District	15,21	10,00	3
Zalaszentgrót District	15,89	11,84	3
Balatonalmádi District	15,04	13,22	2
Körmend District	14,79	15,36	2
Pétervására District	13,03	13,24	2
Budapest 6 th District	20,63	5,85	1
Hajdúszoboszló District	16,10	8,71	1
Sopron District	19,14	7,77	1
Szentendre District	15,79	9,96	1
Szentgotthárd District	18,04	5,21	1
Tapolca District	16,71	9,38	1

* 1: The share of people employed in the IRS sectors is higher than 15 percent and the share of gross value added is lower than 10 percent.

2: The share of people employed in IRS sectors is less than 15 percent and the share of gross value added is greater than 10 percent.

3: The share of people employed in IRS sectors is higher than 15 percent and the share of gross value added is higher than 10 percent.

** Based on the Government Decree 429/2020 (IX. 14) on the definition of tourist areas.

In turn, enterprises, through their role in employment and their contribution to the economy, play a major role not only at the national level, but also in the rise of individual regions, and, moreover, in the management of crises. This is why it is important to identify *vulnerable sectors and regions*. “The impact of globalisation and increased trade liberalisation on European regions”, DG Regio’s final report of 2008 (DG Regio, 2008: 33) identifies as vulnerable regions those regions where employment and/or gross value added is concentrated in one (or a few) vulnerable sectors. In the present study, vulnerable regions are considered by analogy with fragile regions. The economic sectors most exposed to the

effects of the health crisis, which started in 2020, were accommodation and food services (Czifrusz, 2021), and arts, entertainment, leisure (live performances, museums, etc.) and other services (hairdressing, beauty treatment, tattooing, personal services, etc.) (hereafter referred to as the IRS sector), which are involved in personal interaction.

In these sectors, the gross value added of SMEs decreased by 40.2% and in the administrative and support service sector by 15.6% (for more details, see Balás et al., 2020; Boros and Kovalcsik, 2021). Within the group of SMEs in Hungary, the IRS sector accounted for 4.69% of gross value added in 2019 and employed 11% of the workforce. Thus, we considered as vulnerable those districts where the share of SMEs in gross value added exceeded 10% and their share of employees exceeded 15% in the IRS sector. Based on our calculations, we identified 17 vulnerable districts in terms of gross value added and 20 vulnerable districts in terms of employment. (Table 4) There is some overlap between the two groups. The Figure 1 shows the share of gross value added and employment in the IRS sector by district.

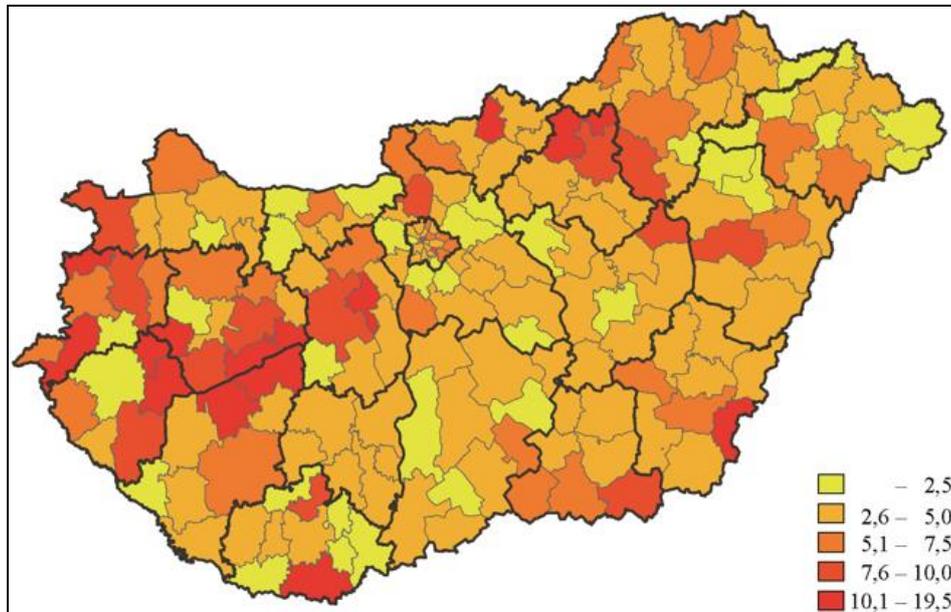


Figure 1. Share of enterprises in the IRS sector in the gross value added of SMEs at district level, 2020 (Source: Own editing based on HCSO data)

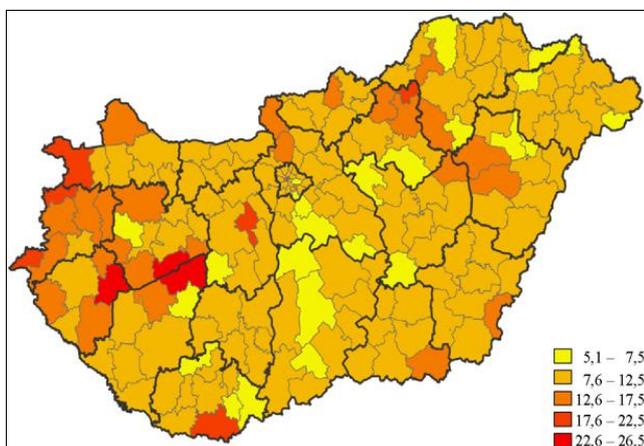


Figure 2 Share of enterprises in the IRS sector in the total number of employed SMEs by district, 2020 (Source: Own editing based on HCSO data)

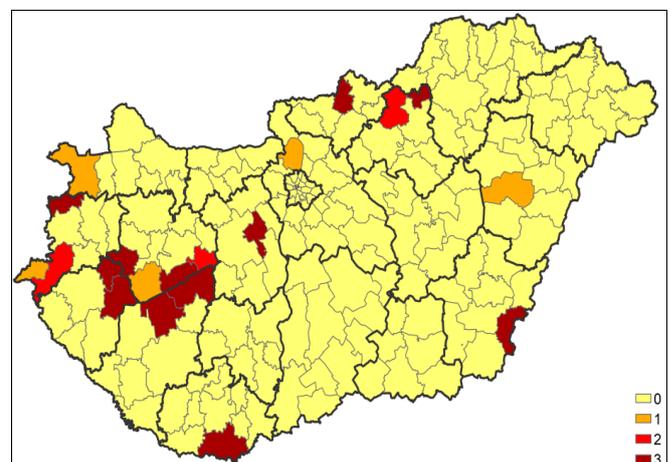


Figure 3. Vulnerable areas (districts) for SMEs, 2020 (Source: Own editing based on HCSO data)

The district-level map (Figure 2) clearly shows that SMEs in the tourism area account for the largest share of the gross value added generated. The map highlights the tourism region of Lake Balaton, Bük-Sárvár, Sopron-Fertő, Győr-Pannonhalma, Mátra-Bükk (Drotár and Kozma, 2021a; 2021b), Debrecen and its region (Monyók et al., 2020).

At the district level, SMEs in the IRS sector account for a larger share of employment in the tourism regions of Balaton, Bük-Sárvár and Sopron-Fertő. The districts impacted by tourism were the most vulnerable due to the pandemic (Figure 3).

CONCLUSION

In the European Union, micro, small and medium-sized enterprises (SMEs) are of paramount importance in closing the productivity gap between regions and areas and in tackling crises, through their contribution to the economy, their role in employment and job creation. The drivers attributed to SMEs that also affect regional development are innovation, social

capital and institutional change. Micro, small and medium-sized enterprises account for almost 99.9% of enterprises in both the European Union and in the home country; the most typical form of enterprise is the micro-enterprise. As in most European countries, the management of SMEs in Hungary is characterised by high labour and low capital intensity. In addition to the most typical indicators of SMEs, our study has also explored the most important characteristics of each crisis for domestic SMEs. For both the financial and capital market crisis and the health crisis, the significant fall in demand was accompanied by a significant fall in employment, although different sectors were also affected due to the different causes of each crisis. During the 2008 crisis, real estate, real estate renting, computer and business and business support services, trade, construction and manufacturing, and automotive were the big losers.

The economic sectors most exposed to the effects of the 2020 health crisis were the so-called IRS sector. The latter was considered as a vulnerable sector in our study and we found that micro, small and medium-sized enterprises in vulnerable sectors and regions are the most exposed to the risk factors of globalisation and technological development, the effects of the crisis. The districts most affected by the health crisis were the Hungarian districts most visited by domestic and foreign tourists, namely Lake Balaton, Bük-Sárvár, Sopron-Fertő, Győr-Pannonhalma, Mátra-Bükk, Debrecen and its region.

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