

THE IMPACT OF SMES ON ROMANIAN INDUSTRY DEVELOPMENT

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Stefan cel Mare University of Suceava, Romaniacosmulese.gabriela@usm.ro**Abstract**

Small and medium-sized enterprises (SMEs) are determinants of economic development, innovation and modernization, achieving a wide range of functions and objectives. SMEs represent the largest share of a country's GDP, generate most of the innovations applicable to the economy, create jobs and show the highest dynamism in the market economy. This is evidenced by their development, turnover and the size of the employed labour force, which is significantly better compared to large enterprises. Based on the analysis of the literature and statistical data, this paper presents the role of SMEs in Romanian industrial development in the context of overlapping crises. Several indicators are analyzed, including the evolution of the number of enterprises by sector, turnover, number of employees by sector, net investment in industry as a whole and in SMEs, gross value added at factor cost, gross value added at factor cost per employee, the share of SMEs in direct exports, the number of SMEs in the industry by size classes. Our study provides an overview of the current state of the economic environment from the perspective of the industrial sector in Romania, presenting at the same time the external and internal trends and factors that act as a barrier to investment activity.

Keywords: *small and medium-sized enterprises; turnover; net investment; gross value added; gross profit; direct exports.*

JEL Classification: *O14, P42*

I. INTRODUCTION

Small and medium-sized enterprises (SMEs) are the economic backbone of many countries and regions, including the European Union (EU), accounting for 99% of all enterprises. SMEs employ around 100 million people and generate more than half of Europe's GDP (European Commission - Entrepreneurship and SMEs). It can therefore be concluded that SMEs are an integral and important part of the EU economy, both in terms of their large share of GDP and as one of the largest employers in the market (Amaral & Peças, 2021).

The small and medium-size business sector plays an extremely important role in a modern economy, being the most active and innovative sector of the economy. Small and medium enterprises are at the forefront of development, they being the most dynamic economic factor. Most of the GDP is produced by small and medium businesses, most of the employed labor force works in this sector. These companies are creating new jobs, most companies are elements of the small business sector, and a large part of the inventions and innovations is generated by these companies.

It is no coincidence that SMEs are seen as an important source of employment creation. The contribution of SMEs to employment has been discussed by many authors in the literature. A number of studies in Romania (Herman, 2012; Acelean et al., 2014) also show that SMEs are important job creators, even though their average labor productivity is lower than that of large firms. The same issue is addressed in a study by Mavlutova, Lesinskis and Olevskis (2017), which examines employment trends in SMEs in developed countries and the role of the service sector in labor market stability. In particular, they argue that the service sector has not only strong sales growth but also the ability to generate and implement innovation.

In their quest to become sustainable, SMEs have to worry about both the cost of investing in their transition to sustainability and how they will obtain finance, and this involves very high risks. In terms of factors that prevent SMEs from investing in activities to combat the impacts of climate events and reduce emissions: availability of finance, finding customers, cost and production or labour, and competition are the most pressing issues facing SMEs according to the European

Investment Bank (EIB), Investment Survey (EIBIS), (2020). At the national level, continue to represent a major obstacle to access to funding (Neagu, 2019). In terms of investment activities, the most relevant barriers faced by SMEs in the EU are in this order: uncertainty about the future, availability of skilled staff, business regulations, labour regulations, energy costs, demand for products/services, availability of finance, digital infrastructure transport infrastructure. In Table 1, according to the EIBIS survey, these obstacles are assigned certain percentages, depending on the extent to which respondents consider that they would affect investment activity (see Table 1). We consider that values above 50% represent major barriers for SMEs in their investment activity.

Table 1. Major/minor obstacles to SME investment activity

Obstacle	Percent (%)	Chart	Caption
Uncertainty about the future	82%		■ EU - Major obstacle ■ EU - Minor obstacle ◇ EU - 2019
Availability of skilled staff	76%		
Business regulations	65%		
Labour market regulations	62%		
Energy costs	56%		
Demand for products/services	51%		
Availability of finance	50%		
Access to digital infrastructure	43%		
Transport infrastructure	40%		

Source: EIBIS, 2020

According to the same study, in terms of full or partial implementation of digitization among firms, at the European level, full implementation is most common among firms in the infrastructure sector (16%), while partial implementation is most common among firms in the manufacturing sector (55%). Thus, the percentage of implementation varies across sectors and technologies. At sector level, the following digital technologies are among the most frequently implemented technologies in certain parts of the business or even in some cases the reorganization of the entire business around these technologies: automation via advanced robotics, augmented or virtual reality, platform technologies, cognitive technologies, 3-D printing (Moeuf et al., 2018).

The National Strategy for the Sustainable Development of Romania 2030 proposes the integration of small and medium-sized enterprises into value chains and foreign markets, the modernization of infrastructure and the sustainable rehabilitation of industries for the efficient use of resources, the adoption of environmentally friendly technologies and industrial processes, the modernization of technological capacities of industrial sectors, the encouragement of innovations.

In Romania, SMEs account for a major share of the total number of economic agents, provide employment and income, and contribute to GDP creation. The characteristics of the main indicators of SMEs, the evaluation of the potential and contribution of this sector in the development of industry in Romania, its evolution, provide the possibility to identify the activity of Romanian SMEs in comparison with other European countries, to argue the main directions of their development.

The influence of net investment, direct exports, and the development of SMEs in the industrial sector, as well as the contribution of SMEs to employment, are still not fully examined in several countries, including Romania, despite the fact that various studies have been conducted at the national and international levels. Our study aims to advance knowledge of how SMEs have impacted the Romanian economy over the past five years. To achieve this objective, we examine the function of SMEs in the growth of the industry in Romania in the context of overlapping crises using secondary data from Eurostat and the Romanian National Institute of Statistics.

In the following section, we will analyse statistical information on the structure and evolution of economic and financial performance indicators at the level of the SMEs, industry sector. There are many such studies in the literature, but it is surprisingly weak in terms of new business start-ups, despite the abundant political rhetoric.

II. DYNAMICS OF ECONOMIC AND FINANCIAL PERFORMANCE INDICATORS AT THE LEVEL OF SMEs

In Romania, SMEs represent 99.7% of all active enterprises and 66.1% of all employment and 55.9% of the total value added generated by the Romanian economic system comes from the SME sector. The most important SMEs in Romania operate in the wholesale and retail trade and manufacturing sectors, which together account for almost half of the total value added generated by the entire SME sector in Romania and more than 50% of the total employment generated by SMEs (European Commission, 2021). The industrial sector at national level comprises four categories of industries: mining and quarrying, manufacturing, production and supply of electrical and thermal energy, gas, hot water and air conditioning, water distribution.

In Romania, SMEs have stood out in the manufacturing industry sector, where not only in terms of number of units, but also in terms of number of employees and turnover, they have a much higher share in total industry, unlike the extractive industry and the production of electricity and heat, gas and water, where these shares are much lower (Burea, 2018).

Regarding the share of the industrial sector in the gross domestic product (GDP) in Romania in 2021, according to Statistics 2023, industry contributed about 27.78%.

According to INS (2023), in March 2023, industrial production in Romania contracted by 3.4% y-o-y, the fifth consecutive month of contraction, but milder compared to the previous month's 4.9% decline, which was the softest since August 2022, with smaller falls in output in the manufacturing sector (-1.6%, -5%) and increases in output in the mining and quarrying sector (+2.5% and -1.9%). On the other hand, production in the electricity, gas, steam and air conditioning sectors continued to fall (-15% and -10.1%). On a monthly basis, industrial production rose by 0.2% in March, recovering from the previous month's 0.2% decline.

Legislation is putting greater pressure on industrial companies to move toward sustainability as they work to meet their climate goals. Accordingly, a recent study by Horváth, which examined six industrial sectors in Europe and two in North America, reveals that the primary "net zero" initiatives that businesses are concentrating on to meet their sustainability objectives are: (1) increasing energy efficiency - 45%; (2) taking steps to offset CO2 emissions - 45%; (3) using renewable energy sources - 43%; (4) changing operating models - 37%; (5) supply chain changes - 35%; and (6) creating in-house renewable energy generation capacity.

The evolution of the number of enterprises, turnover, number of employees, gross value added per employee, net investments and gross operating result for total industry and SMEs for the period 2016-2020 are presented below (see Figure 2-10).

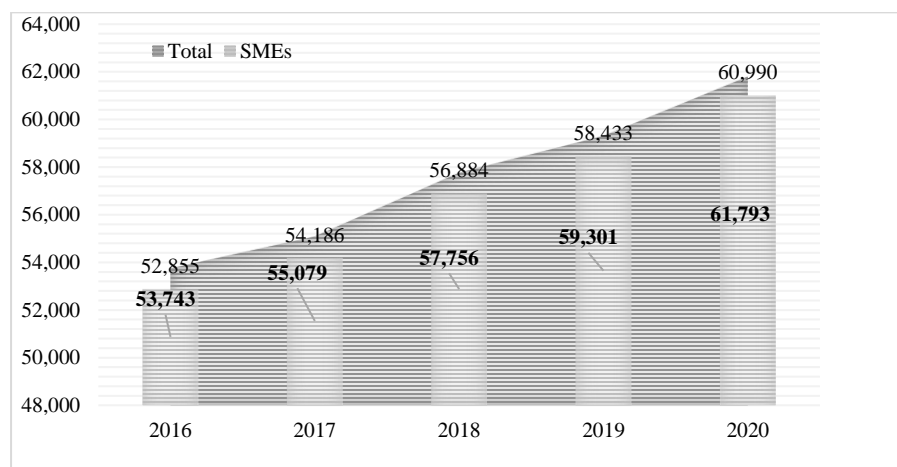


Figure 2. Evolution of the number of active enterprises in industry, by total and SMEs, 2016-2020 (in million lei current prices [1])

Source: authors, based on data from the INS, 2016-2020

From Figure 2, we can see a slight increase (4.19%) in the number of enterprises in total, and 4.03% in the number of SMEs in 2020 compared to the previous year.

According to Statistica 2023, in Romania, there were 536 thousand SMEs recorded in 2022. As of 2022, there will be over 483 thousand SMEs, the majority of which are micro-sized businesses with up to nine employees. In the same year, micro-sized businesses contributed a total of about 22.3 billion euros in value. As a result, the total number of SMEs in 2022 compared to 2021 experienced an insignificant increase of 1.2%. But the only thing that went up was the total number of SMEs. There were fewer large businesses overall. The number of medium-sized enterprises decreasing by 35 enterprises, from 7,567 to 7,532.

According to Figure 3 it can be seen that the turnover of SMEs had a continuous increase from 2016 to 2019, and with the onset of the COVID-19 pandemic, this indicator experienced a slight decrease in 2020 by 3.37 percent compared to the previous year. This increase in turnover is due to 15-19% of new innovative products or services (Herte et al.,2021).

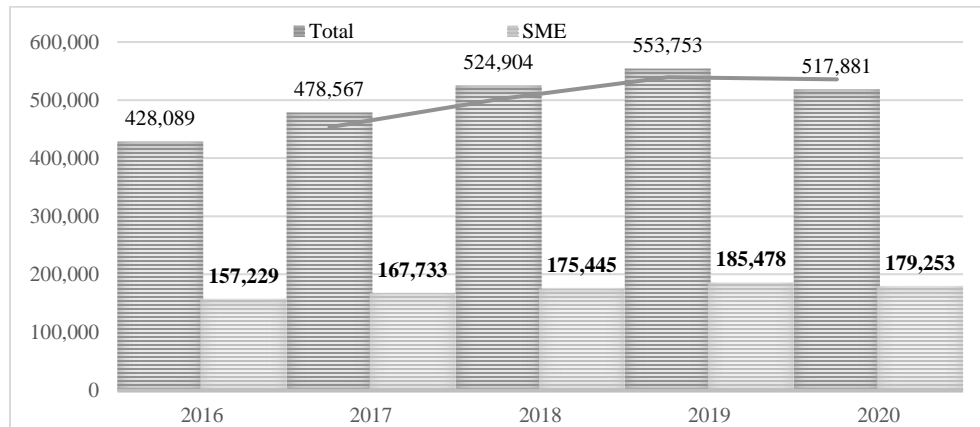


Figure 3. Evolution of turnover by total industry and SMEs, 2016-2020 (in million lei current prices)
Source: authors, based on data from the INS, 2016-2020

The INS in a press release estimates that the total industry turnover increased in nominal terms from March 2022 to March 2023 by 3.1%, mostly as a result of the extractive sector's 145.8% and the manufacturing industry's 21.7% growth. Furthermore, turnover increased in the following industries, by main industrial group: products industry (+15.6%), capital goods industry (+11.5%), and consumer goods industry (+11.5%). sector (+0.5%). The energy industry experienced a decline (-6.9%) as well as the durable goods sector (-6.9%). goods (-1.1%).

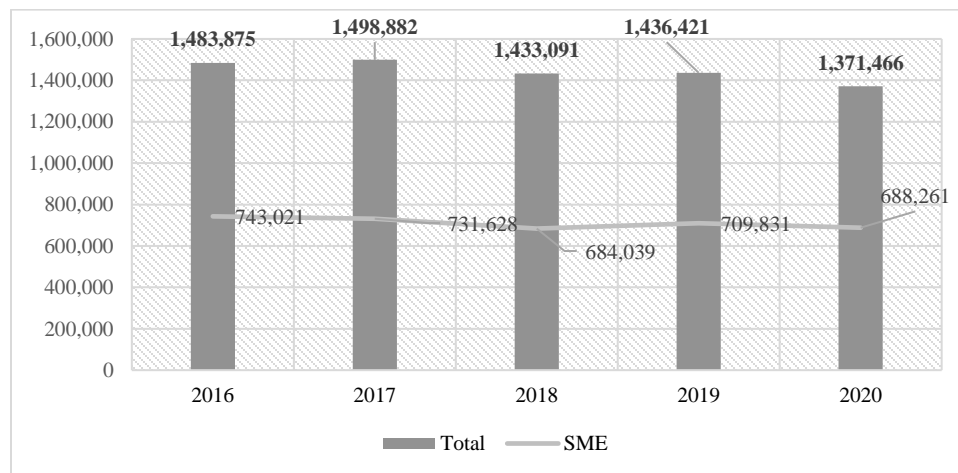


Figure 4. Industry employment by total and SME, in the period 2016 - 2020
Source: authors, based on data from the INS, 2016-2020

Figure 4 demonstrates that the number of employees in the industrial sector has decreased by 4.52 percent, primarily as a result of the health epidemic.

However, Vasile et al. (2020) claim that this reduction may be substantially attributable to the labor market bottleneck caused by China's usage of labor in many Romanian manufacturing companies. Production of utilities and mining and quarrying have seen divergent trends in labor demand. As a result, although the industrial sector saw a decline in demand for energy raw materials, the residential sector saw an increase in demand for utilities. Some utility and energy commodity producers are currently experiencing economic and financial challenges, which is placing pressure on employee wages (Press information of Ministry of Labour, 2020).

The national industrial sector has been severely impacted by the COVID-19 pandemic crisis. With all of these factors combined, the Romanian labor market is already dealing with a severe structural and level of economic crisis, with cronical deficits positioned in the health sector, the market for TIC experts, the edtech and other services for manufacturing, the construction industry, and some other industrial sectors (Vasile et al., 2020).

The topic related to job creation and gross value added formation by SMEs has been explored in a study by Dobrota (2014), which reflects that SMEs provide 66.5% of jobs and contribute 57.6% of value added.

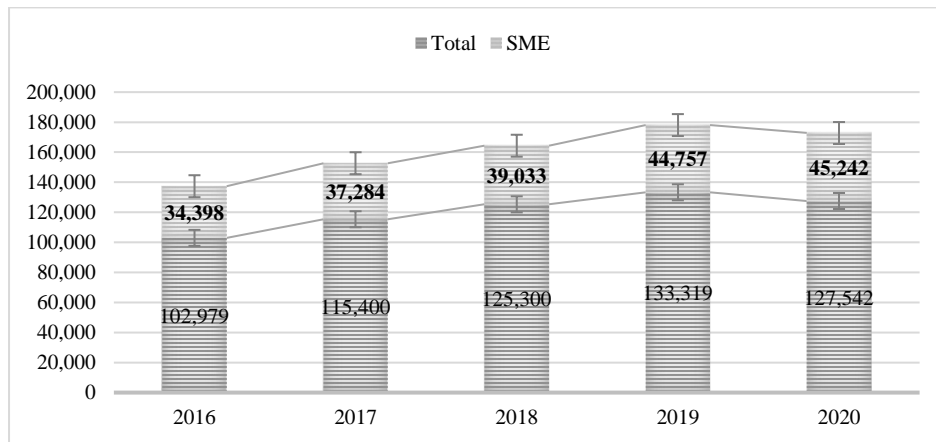


Figure 5. Gross value added at factor cost by total industry and SMEs, 2016-2020 (in million lei current prices)

Source: authors, based on data from the INS, 2016-2020

At the height of the epidemic in 2020, several businesses shut down and employees were let go. As a result, the non-financial company economy reported €6.5 trillion in value added at factor cost, which is a considerable reduction (-6%) from €6.9 trillion in 2019. Value added by SMEs totaled €3.4 trillion, a little decline of 5% from €3.9 trillion in 2019. In 2020, there were 127.7 million people working in the non-financial business sector, a decrease of 3% from 131.5 million in 2019 (Eurostat, 2022).

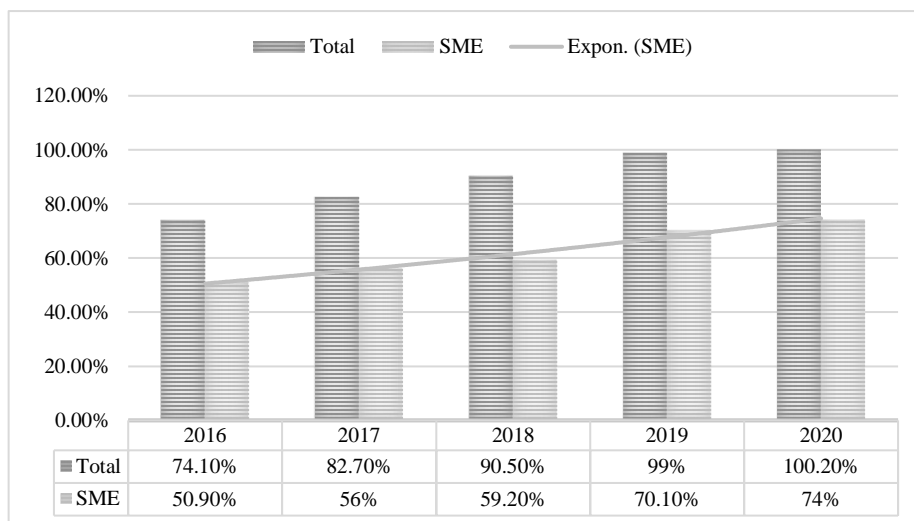


Figure 6. Gross value added at factor cost per employee in industry (thousand lei current prices/employee)

Source: the authors, based on data from the INS, 2016-2020

The gross added value of the industry sector in the Romanian economy had a negative value of -9.1 percent in 2020, according to Statistica (2023), as a result of the coronavirus (COVID-19) epidemic in that country. Surprisingly, this indicator registered an increase of 5.8% in 2021. Also, the prediction, however, shows a positive GAV of more than 4% from 2022 to 2024.

Investments in the nation's manufacturing sector are another crucial metric. These support the country's economic growth and the strengthening of its international economic position. According to data from the National Institute of Statistics, investments in the Romanian economy were 150 mld.de lei in 2022. Investment income in the industry was 20,2% in 2022. The positive influence of investments on economic growth and business revenue is highlighted in the study on investments in the Romanian economy by [Gherghina et al. \(2020\)](#). This influence is confirmed for all national-level operating businesses.

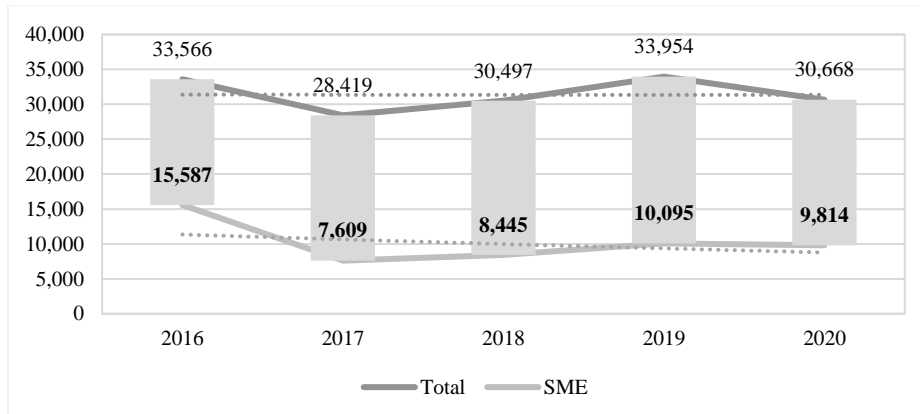


Figure 7. Net investment by total industry and SMEs, 2016-2020 (million lei current prices)

Source: the authors, based on data from the INS, 2016-2020

In terms of SMEs, the funding mix in 2020 was as follows: 88.9% from domestic sources; 8.3% from internal credits; 0.4% from external credits; 0.5% from state and local budgets; 0.2% from foreign capital; and 0.8% from other sources.

According to Competition Council Report (2020), a decrease in intra-group loans and non-resident stock ownership will accompany this unfavorable development in 2020, creating a scenario reminiscent of the financial crisis of 2007–2008, when a lack of liquidity on global markets led to a capital flight from Romania. One of the structural vulnerabilities of the Romanian economy, namely the low competitiveness of domestic enterprises in international markets, which is shown in the progressive widening of the trade balance deficit, is linked with the severe decline in foreign investment in the first half of 2020.

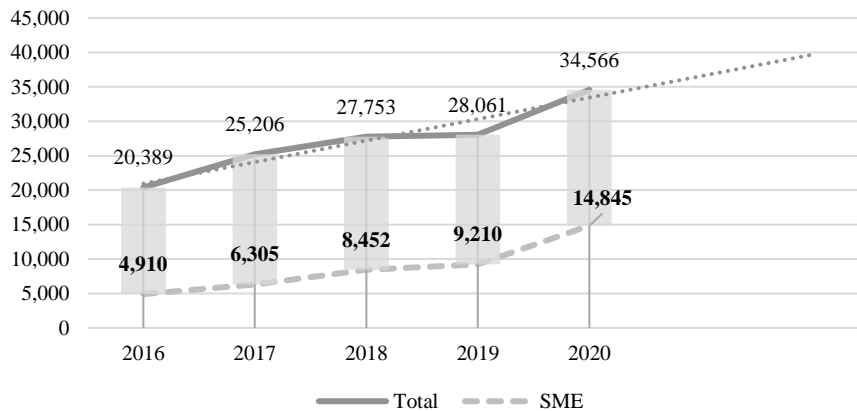


Figure 8. Gross profit for the year for total industry and SMEs, 2016-2020 (in million lei current prices)

Source: the authors, based on data from the INS, 2016-2020

According to Figure 8, which analyzes the performance of the SME sector in terms of total value added at factor prices, it has shown consistent development from 2016 to 2020. In 2020, SMEs made 42.95% more money than they did in 2016, which was the previous year.

Any country's economy must have increasing exports as a primary goal. The Romania SME Fact Sheet (2022) indicates that 2021 exports from Romania are anticipated to expand significantly over 2020 exports. Machines, vehicles, and other manufactured goods make up the majority of exports.

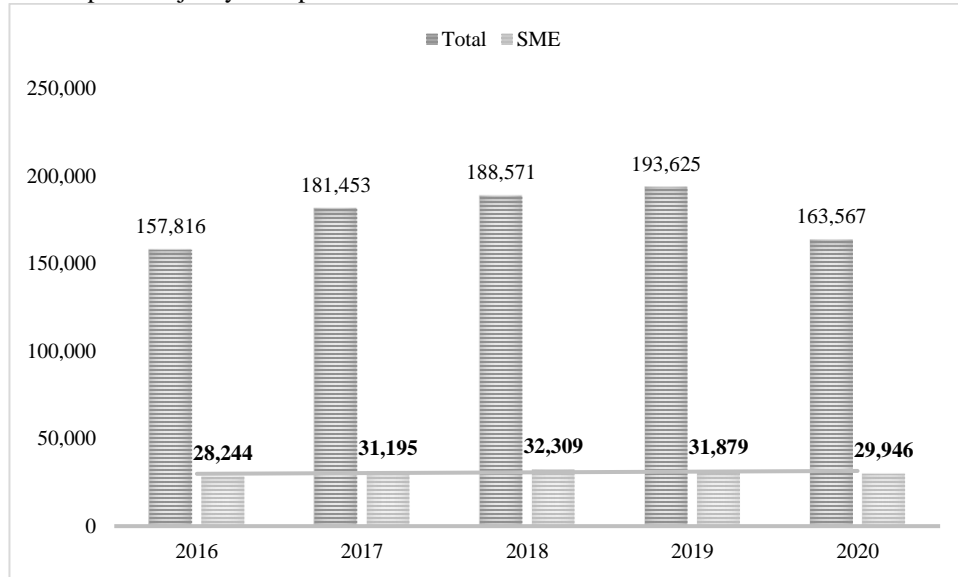


Figure 9 – Direct exports of industrial enterprises in the period 2016-2020 - million lei

Source: the authors, based on data from the INS, 2016-2020

In 2021, Romania exported a total of \$90.8B, making it the number 42 exporter in the world. During the last five reported years, the exports of Romania have changed by \$24.9B from \$65.9B in 2016 to \$90.8B in 2021. The most recent exports are led by Motor vehicles; parts and accessories ((\$6.52B), Cars (\$6.16B), Insulated Wire (\$4.31B), Electrical Control Boards(\$2.75B), and Wheat (\$2.33B). The most common destination for exports of Romania are Germany (\$17.7B), Italy (\$8.85B), France(\$5.5B), Hungary (\$4.51B), and Poland (\$3.5B).

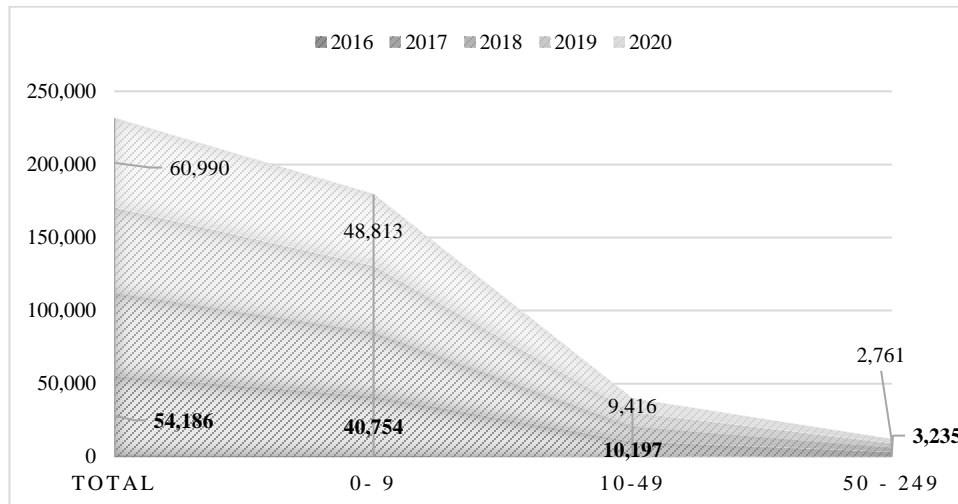


Figure 10 – Number of SMEs in the industry by size classes in the period 2016-2020

Source: the authors, based on data from the INS, 2016-2020

Figure 10 suggests that although businesses in the microenterprise universe appear to be weak, their contribution to the economy is not insignificant; in 2019 they made up 92% of all businesses in Romania (Vasiliu, 2021).

The study by Sava (2020) underlines that for the most energetic and creative individuals, the growth and increase in the number of SMEs in Romania gives greater alternatives, including full autonomy, professional fulfillment, and social fulfillment.

The SME has been negatively impacted by the COVID-19 situation. This highlights the fact that small and medium-sized businesses have historically relied on "just-in-time" production processes, have struggled to adapt to supply chain disruptions, and have excess inventories even though the percentage of micro-enterprises is rising. Lemańska-Majdzik, Okręglicka and Gorzeń-Mitka (2017) believe that some of the factors that highlight the need to encourage the SME sector include improving economic and financial welfare, generating new jobs, incorporating technical and economic advancement, boosting international competitiveness, or eliminating social inequities.

III. CONCLUSIONS

The analysis of economic and financial performance indicators (turnover, number of employees, gross investment, gross value added, gross profit for the year) at the level of SMEs reflects in some cases the recording of negative values after 2019, which demonstrates once again the fragility of the economy in the face of tensions in the labour market, combined with the effects of psychological effects on consumers (reduction in spending considered non-essential, uncertainty about job security, etc.), mainly due to the health crisis, but also the impact of measures promoted by the government, the effects of which are very often contrary to expectations.

Throughout this time, SMEs have received assistance and recovery measures, with the government intervening with new financing schemes, urging banks to lower current loan rates and simplify access to new lines of credit. Regrettably, in Romania, these initiatives to promote the SME sector equal to 2% of GDP, whereas in other countries, aid amounts to around 10% of GDP.

In the analysis, economic and financial indicators from the years 2016 to 2020 were considered. Throughout the analysis, we were able to intervene with some details and updates in addition to making a call to a presale communication or a brief analysis performed by Statistica and Eurostat. The results should be regarded with caution due to the short time series.

End notes

[1] Current prices are those indicated at a given moment in time and said to be in nominal value.

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