IMPACT OF COVID-19 PANDEMIC ON LITHUANIAN SMALL AND MEDIUM-SIZED BUSINESSES

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Abstract

World Health Organization March 11, 2020 declared an outbreak of coronavirus infection as a pandemic. The Government of the Republic of Lithuania, in response to the emerging threats of the pandemic and in order to reduce the consequences of the COVID-19 pandemic in on March 16, 2020 announced the first quarantine. During the first quarantine, the procedure of public and private sector activities was established in Lithuania, and the activities of many companies were banned or restricted. Businesses in the country, whether micro, small, medium or very large, were forced to reduce or close down as the disease continued to rise, the number of people in self-isolation grew and the number of people in employment declined. SMEs are the predominant business structures, accounting for more than 99.8 percent in the EU. SMEs are a very important part of the country's economy and their development leads to sustainable and competitive growth of the country's economy, which creates economic well-being for citizens and social security. The article defines the concept of SMEs and the classification of business, identifies its significance at the macroeconomic level and analyzes the situation of small and medium-sized enterprises before and during the COVID-19 pandemic.

Key words: *small and medium-sized enterprises (SMEs), micro, small and medium-sized enterprises, financial and economic business indicators, COVID-19 pandemic.*

JEL Classification: M10, M20, M40, M48

I.INTRODUCTION

Small and medium-sized business is a very important part of Lithuania's socio-economy because:

- First, micro (0-9 employees), small (10-49 employees) and medium-sized enterprises (50-249 employees) have the largest share in the Lithuanian business structure, i. e. business foundation. According to the data of the Lithuanian Department of Statistics, in 2020 at the beginning of the year, there were 278.6 thousand operating non-financial companies, of which 99.86 percent were micro (0-9 employees), small (10-49 employees) and medium-sized enterprises (50-249 employees). In Lithuania, the share of SMEs in the overall business structure tends to increase i. e. since 2007 until 2020 these business structure entities increased 1.74 times;
- Second, micro (0-9 employees), small (10-49 employees) and medium-sized enterprises (50-249 employees) have the largest share of employed people. The number of persons employed in non-financial companies in 2020 was 1,112,105. There were 1,112,105 employees (1,029,214 in 2007), and 74.76 percent of all employed persons worked in micro enterprises (0-9 employees), small enterprises (10-49 employees) and medium-sized enterprises (50-249 employees);
- Third, very small micro (0-9 employees), small (10-49 employees) and medium-sized enterprises (50-249 employees) make a very significant contribution to creating sustainable economic growth in Lithuania. These business structures in 2020 created 66.15 percent added value (Lithuanian Department of Statistics,2021). The very large and constantly growing share of small and medium-sized businesses in the Lithuanian economy also presupposes the growing economic and social significance of these businesses.

The COVID-19 pandemic, the quarantine introduced during it and the restrictions on economic activities in order to stop the pandemic outbreak, had a negative impact on the Lithuanian economy. The magnitude of the effects of the COVID-19 pandemic varies across the country's economic sectors, both in regions and companies. The size of the entity, the specifics of activity and management, the number of employees, accumulated stocks, supply chain management, etc. factors determine the resilience and flexibility of economic operators in times of crisis. On 16 March 2020, the Government of the Republic of Lithuania approved a plan of measures to stimulate the economy and mitigate the effects of the COVID-19 pandemic, the "Plan of Economic and Financial Measures for COVID-19" (hereinafter referred to as the Plan). The plan introduced provisions to facilitate the payment of taxes and state social security contributions in order to preserve jobs and the income of the population, state-financed downtime and partial downtime, subsidies for small entrepreneurs and urgent tax loans to maintain business liquidity, deferring on an agreed schedule, not applying interest, suspension of recovery actions in accordance with prudential criteria and other measures to ensure business liquidity.

Aim of the study - to evaluate the impact of COVID-19 on Lithuanian small and medium-sized businesses.

Object of the research – micro (0–9 employees) (hereinafter – micro), small (10–49 employees) (hereinafter – small) and medium-sized enterprises (50–249 employees) (hereinafter referred to as medium) operating in Lithuania (excluding agricultural, financial and insurance activities).

Research methods – analysis and synthesis of scientific literature, comparative and structural analysis of statistical data, generalization.

 $Limitations\ of\ the\ study$ – the study used freely available data provided by official SMEs involved in or conducting research. Some statistics have not been updated and the latest annual surveys have not yet been published

II.THE COURSE OF THE COVID-19 PANDEMIC IN LITHUANIA

At the end of 2019 when the new virus was detected in China, it was not expected to spread around the world at a rapid rate and with a rapidly growing number of cases. Both businesses and public authorities were not prepared for a global pandemic. At the beginning of 2020, Lithuania was one of the European Union countries that reacted the fastest and most rigorously to the situation. In Lithuania, not only the decision to introduce national quarantine was made fairly quickly, but an economic stimulus package was also announced.

Table 1. COVID-19 chronology and management tools in Lithuania

Date	Events	
December, 2019	An outbreak of a new coronavirus disease was reported in Wuhan, China.	
	The virus spread rapidly to other regions of China and the world. The new coronavirus was later officially recognized by the WHO as SARS-CoV-2 and the disease was named COVID-19 (Council action on Covid-19, 2021)	
January 30, 2020	WHO declared a global emergency over the spread of COVID-19 (Council action on Covid-19 2021)	
February 11,2 020	WHO declared a global pandemic of COVID-19 (coronavirus infection) Council action on Covid-19, 2021)	
February 26, 2020	A state of emergency was declared in Lithuania due to the threat of the spread of the new coronavirus (COVID-19) (The Government of the Republic of Lithuania. Resolution No. 15)	
February 28, 2020	The first case of COVID-19 was recorded in Lithuania (The Government of the Republic of Lithuania 2020 activity report)	
March 16, 2020	The first quarantine was announced in Lithuania (The Government of the Republic of Lithuania. Resolution No. 207). Procedures for public and private sector activities were established. Many businesses have been banned or restricted.	
March 16, 2020	Lithuania has announced the third (full readiness) level of civil protection system readiness.	
March 16, 2020	The Government of the Republic of Lithuania approved and presented a plan of measures to stimulate the economy and reduce the consequences of coronavirus (COVID-19). The total volume of measures, together with the lending potential of banks - 5 billion. The amount of government measures is 2.5 billion euros. The main objectives of this action plan are: ensure the necessary resources for the efficient operation of health and public protection systems; to help preserve jobs and the income of the population; help businesses maintain liquidity; stimulate the economy; ensure the liquidity of the state treasury (The Government of the Republic of Lithuania. Plan of measures to stimulate the economy and mitigate the effects of coronavirus (COVID-19)	
June 16, 2020	End of the first quarantine in Lithuania.	
November 7 2020	The second quarantine was introduced in Lithuania (Resolution of the Government of the Republic of Lithuania No. 1226). It is envisaged that preferential support may be claimed by economic operators whose: turnover of economic activity in the last 6 months, compared to 2019 in the respective period, according to the data provided by the State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania, decreased by at least 30 percent; at least 40 percent of economic operators in the respective economic activity have also experienced a decrease of at least 30 percent in the last 6 months compared to 2019 during the relevant period.	

December 16, 2020	Changes made in the principle of assigning and granting operators of economic activities preferential aid (Resolution of the Government of the Republic of Lithuania No. 1424). Economic operators with an average monthly turnover of economic activities from 2020 onwards are eligible for state support. October 1 until 2021 31 January compared to 2019-2020 the average monthly turnover for the respective period decreased by at least 30 percent.
June 30, 2021	End of the first quarantine in Lithuania.
July 1, 2021	A state of emergency was declared in Lithuania (Resolution of the Government of the Republic of Lithuania No. 2021-14469)

During the COVID-19 pandemic, some companies were forced to close down and employees were announced as being on downtime. According to the data of the Ministry of Social Security and Labor of the Republic of Lithuania since the beginning of the first COVID-19 pandemic quarantine in March 2020 to the end of August 2021, the opportunity to receive subsidies covering part of the employees 'salaries was used by 31.5 thousand employers who had declared downtime and the amount of 520.344 million EUR was paid in subsidies for downtime. Also 29 thousand employers were paid 622.6 million in subsidies for employees starting to work after downtime and for recruiting the unemployed (Ministry of Social Security and Labor of the Republic of Lithuania) sent by the by the above-mentioned service.

III.REVIEW OF LITERATURE

SMEs as a phenomenon in socio-economic research and studies are not a new and unexpected object of research, but the topic "Impact of the COVID-19 pandemic on Lithuanian small and medium-sized enterprises" is relatively new and less widely described in Lithuanian and global scientific sources. In the first year of the COVID-19 pandemic, taking into account the significant role of SMEs in the Lithuanian economy, the first research was carried out and the first studies were written. Lithuanian researchers examined and assessed the impact of the pandemic on the economic and managerial aspects of SME's. Župerkienė, Šimanskienė, Labanauskaitė, Melnikova and Davidavičienė (2021) assessed the resilience of small and medium-sized enterprises during the COVID-19 pandemic, i. e. the response of organizations to the threats posed by COVID-19 and the restrictions on economic activities imposed by the government. The authors of this study noted that small and medium-sized enterprises have suffered heavy losses, lacking preparedness and consistency in dealing with unexpected problems during a pandemic and quarantine.

The KTU research group led by prof. R. Krušinskas conducted the research in the framework of the research project "Assessment of the financial resilience of Lithuanian companies to the economic shock of COVID-19 and the losses of different economic activities" and compared the economic shock caused by the pandemic with other financial and economic crises including the global financial crisis in 2008.

Strakšienė, Ruginė and Šaltytė-Vaisiauskė (2021) revealed the peculiarities of teleworking in small and medium-sized enterprises in the context of COVID-19, i.e. analyzed the changes in work organization under COVID-19, identified the specifics of telework organization by sector of activity (manufacturing, trade or services) and highlighted the advantages, disadvantages and prospects of telework. In the course of this study, a business insolvency study methodology was developed to determine the impact of COVID-19-related phenomena on corporate solvency, to assess the short-term effectiveness of state aid measures, and the long-term effects of the crisis on Lithuanian business and employment in vulnerable groups, economic sectors and regions. Nikolajenko, Viederytė, Šneiderienė and Aničas (2021) analyzed and evaluated the effectiveness of the aid measures of the government of the Republic of Lithuania in order to encourage a short-term business recovery.

Nikolajenko, Viederytė, Šneiderienė and Aničas (2021) observed that the management of the negative consequences of the first quarantine was abundant by various means, but the effectiveness was insufficient, as a large part of state support was not used, especially to maintain liquidity. This reason is also indicated by ISM researchers in the project / study "Development and application of corporate insolvency research methodology to assess the consequences of COVID-19 in Lithuania". In the course of this study, a business insolvency research methodology was developed to determine the impact of COVID-19-related phenomena on corporate solvency, to assess the short-term effectiveness of state aid measures for business, and the long-term effects of the crisis on vulnerable businesses, individual economic sectors and regions.

The studies of foreign researchers examine and evaluate the effectiveness of restrictions on the economic activities of the world's countries and interventions aimed at ensuring the health care of the population and reducing the negative impact on the economy. According to the researchers, even with stimulus measures, the COVID-19 outbreak has caused major disruptions and changed many of the existing and traditional business models of small and medium-sized enterprises around the world (I. J. Akpan, I. C. Ezeume, Udomboso, A. Ezeume, & A. Akpan, 2020; Akpan, Soopramanien & Kwak, 2020).

According to Papadopoulos, Baltas, Balta (2020) and Tang, Zhang & Lin (2021), socio-economic constraints had a significantly stronger negative impact on SMEs than on large enterprises. Small and medium-sized enterprises are more vulnerable because they tend to have lower financial and real capital, lower levels of productivity. Researchers highlighted the role of digital technologies in increasing productivity and productivity and discussed the potential governance implications of using digital technologies to address the consequences of a global pandemic. According to Bella-Elliott, Cullen, Glaeser, Luca, & Stanton (2021), limited research to date has focused on macro-environmental factors and their effects during a SME pandemic, but generally did not consider the psychological aspect as one of the determinants of business renewal. According to researchers, the values, beliefs, behaviors, and cognitive patterns of entrepreneurs fundamentally shape the characteristics, survival, and growth of a business. Therefore, the resumption of business after the closure of a company, like any strategic behavior of small businesses, can be foreseen by the psychological-cognitive characteristics of entrepreneurs.

Scientific studies and articles not only examine the impact of the COVID-19 pandemic on SMEs, but also assess the reasons for the different levels of impact in individual countries. According to Akpan, Udoh & Adebisi (2020), in advanced economies such as the US, Germany, the UK and Canada, a significant proportion of small businesses have been severely disrupted, with some sectors becoming more vulnerable (e. g. aviation, tourism, hotels, restaurants, entertainment), but unlike these companies in developed countries, which have the latest infrastructure and sound economic and political systems, many SMEs in developing countries face very serious challenges. According to the researchers, the availability of modern technologies in developing countries is one of the key problems for SMEs. Foreign authors have not only studied the impact of the pandemic on SMEs, but the research has revealed the impact of this impact on the global economy as a whole.

Kalogiannidis (2020) states that in the world, "the economy depends on how small and medium-sized enterprises succeed in overcoming the crisis". With a sharp decline in global business activity, the supply chain has been affected, impacting global trade. The impact of the pandemic on SMEs, the specifics of employees' work and changes have changed the general business policy and created economic imbalances. The study revealed that at the beginning of the pandemic, small businesses had very little reserve funds and eventually had to reduce their costs, seek additional sources of funding, or declare bankruptcy. All of this has affected the structure of the global economy, as declining consumer purchasing power and declining demand prevent businesses from being able to take risks and invest in commodities, to provide for supplies.

IV.SMES IN LITHUANIA IN 2007-2020

SMEs are an important part of every country's economy. Micro-enterprises account for the largest share of all enterprises operating in Lithuania: from 89.5 percent in 2007 up to 94.6 percent in 2020, their share in the total number of non-financial enterprises operating in Lithuania increased steadily every year (Figure 1). The share of small and medium-sized enterprises in the number of all enterprises operating in Lithuania has gradually decreased. Small businesses in 2007 accounted for 8.5 percent of all companies operating in Lithuania, and by 2020 only 4.4 percent. Thus, the already small share of medium-sized enterprises (only 1.8 percent in 2007) decreased more than twice and in 2020 was less than 1 percent (0.8 percent). The number of large enterprises among all enterprises operating in Lithuania is very small, less than one percent, and their share in the structure of all operating enterprises is constantly decreasing: in 2007 it was 0.23 percent and in 2020 and only 0.14 percent.

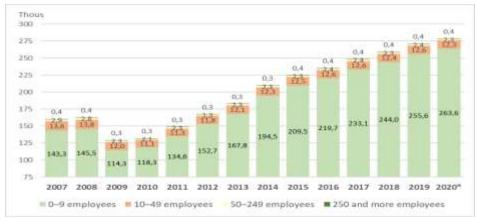


Figure 1 – Number of Lithuanian enterprises by their size in 2007-2020, thous. Source: compiled by the author according to the data of the Lithuanian Department of Statistics.

SMEs are an ever-changing group of companies. 2011 - 2014 was the fastest year for the growth of the number of business enterprises in Lithuania. In 2011-2012 the total number of non-financial corporations increased by 12.6 percent each year when the number of micro-enterprises grew by more than 13 percent per year. In 2013 the total number of enterprises increased by 9.2 percent and the number of micro-enterprises increased by 9.8 percent, in 2014 the total number of enterprises increased by 14.8 percent and the number of micro-enterprises increased by almost 16 percent. Since 2015 the growth rates of both the total number of enterprises and the number of micro-enterprises decreased, but by 2020 the growth rate of the number of micro-enterprises was higher than the growth rate of the total number of enterprises. It is the growth of the number of micro-operating companies that has led to an increase in the total number of all Lithuanian companies.

The majority of the total number of enterprises operating in Lithuania was concentrated in six activities and in 2020 accounted for a significant share of the total number of enterprises: wholesale and retail trade and repair of motor vehicles and motorcycles (20 percent), professional, scientific and technical activities (13 percent), construction (12 percent), transport and storage (9 percent), manufacturing (8 percent), repair of computers and personal and household goods, and other personal service activities (8 percent) (Figure 2). The number of SMEs in wholesale and retail trade and repair of motor vehicles and motorcycles, professional, scientific and technical activities, construction and manufacturing is more than 99 percent.

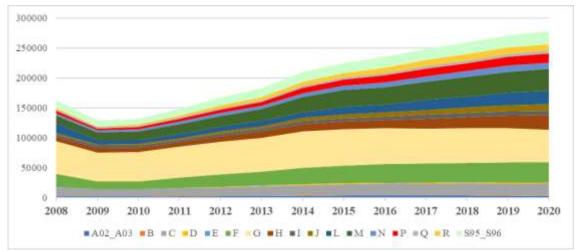


Figure 2 – Number of SMEs by type of activity in 2007-2020

Source: compiled by the author according to the data of the Lithuanian Department of Statistics.

Forestry and fishing (A02_A03), Mining and quarrying (B), Manufacturing (C), Electricity, gas, steam and air conditioning supply (D), Water supply, sewerage, waste management and remediation activities (E), Construction (F), Wholesale and retail trade and repair of motor vehicles and motorcycles (G), Transport and storage (H), Accommodation and food service activities (I), Information and communication activities (J), Professional, scientific and technical activities (M), Administrative and support service activities (N), Education (P), Human health and social work activities (Q), Arts, entertainment and recreation activities (R), Repair of computers and personal and household goods and other personal service activities (S95_S96).

The majority of wholesale and retail trade and repair of motor vehicles and motorcycles are carried out by micro-enterprises (94 percent in 2014-2020). Since 2007 the number of enterprises engaged in professional, scientific and technical activities increased in 2007, and the share of micro-enterprises in these activities accounted for a significant share and increased to 98 percent in 2019-2020, and the share of small businesses in this area declined (Figure 3). The majority of construction also goes to micro-enterprises (93 percent in 2019-2020), the number of which has been growing every year at the expense of the number of small enterprises. The relative share of enterprises operating in the field of transport and storage is increasing, the share of the number of SMEs in this activity is 99.7 percent. The number of micro-enterprises in transport and storage is growing: since 2007, increased by as much as 15 percent points and 2020 exceeded 92 percent the number of all companies in this area. The number of small businesses in this area has decreased more than 3 times. Microenterprises also accounted for a significant share of manufacturing activity (87 percent in 2020) and the number of small enterprises in this area was relatively small (9 percent in 2020). Repair of computers and personal and household goods and other personal service activities until 2020 remained stable since 2016, it all belongs exclusively to SMEs. Very small enterprises occupy almost the entire mentioned field of activity (99 percent in 2013-2020), the share of small enterprises in this field in 2020 accounted for less than 1 percent. The number of

medium-sized and large enterprises engaged in the above-mentioned activities is insignificant: in 2020 it did not even make up 1 percent.

An important reflection of the results of business activities is the turnover of enterprises, which includes the income recognized or received by the entity during the reporting period from the sale of goods and/or provision of services, from which the amounts of sales, write-downs, discounts are deducted. The turnover of Lithuanian non-financial companies in 2020, compared to 2007, increased 1.66 times: from 60,208.4 million EUR up to 99872.3 million EUR. In Lithuania in 2011 the turnover of non-financial business enterprises grew the fastest: as much as 20.1 percent per year.

In that year, the turnover of SMEs increased by 21.4 percent per year, of which the turnover of micro and small enterprises increased respectively by 24.6 percent and 23 percent. (Figure 3). Until 2015 the growth rates of the turnover of Lithuanian companies decreased and in 2015 amounted to only 1.4 percent. The turnover of SMEs during 2015 of which the turnover of micro-enterprises increased by 6 percent. Although from 2017 the turnover growth rate of SMEs was slower than that of all non-financial enterprises, in 2018-2019, the turnover growth of micro-enterprises (respectively 9.8 percent and 8.2 percent) was higher than that of the total business (8.7 percent and 7.1 percent, respectively). This shows that SMEs and even micro-enterprises have a significant impact on the overall economic growth.

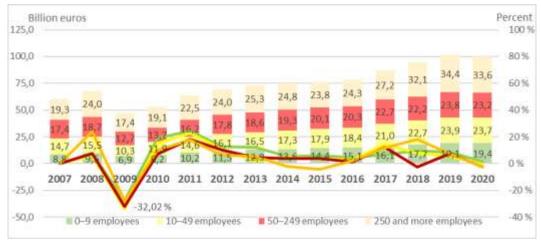


Figure 3 – Lithuanian business turnover (billion Euros) by company size and the rate of change in the turnover chain in 2007-2020

Source: compiled by the author according to the data of the Lithuanian Department of Statistics.

SMEs generate economic benefits in a variety of areas. SMEs generate about two-thirds of all non-financial business income: The turnover of SMEs accounted for 68 percent, and in 2018-2020 decreased to 66 percent. The major part (from 42.6 percent in 2007 to 41.1 percent in 2020) of all income of enterprises operating in Lithuania is accumulated in wholesale and retail trade and in repair of motor vehicles and motorcycles. About three quarters of the income earned by wholesale and retail trade and repair of motor vehicles and motorcycles is accounted for by SMEs: from 77.2 percent. 2007 up to 72.8 percent. In 2020 small businesses earned two-fifths (40.2 percent in 2007 and 40 percent in 2020) of SMEs revenue. The share of income earned by microenterprises in this area has increased, their share increased by 8.3 percent points and 2020 accounted for almost a third (31.3 percent) of total SMEs revenue.

The added value is an integral part of gross domestic product. The value added at production costs includes income from sales of Lithuanian non-financial business and income from other activities, except income from sale of fixed assets, capitalized production, changes in inventories during the year excluding purchases of goods and services, and subsidies excluding taxes on products and production. The highest value added growth of Lithuanian non-financial enterprises in 2011 compared to 2010 was 21.8 percent, while the increase in added value of large enterprises was only 13.1 percent, and that of SMEs more than doubled: 26, 6 percent. (Figure 4). This was due to a 38 percent increase in the value added of micro-enterprises and a 24 percent increase in the value added of small and medium-sized enterprises. In 2020, compared to 2019, the value added generated by Lithuanian non-financial business enterprises increased by 5.9 percent. This was due to an increase in the added value of SMEs of 6.5 percent: the value added created by micro and medium-sized enterprises in 2020 increased by 6.5 percent each, and for small ones by slightly more than 7 percent.



Figure 4 – The added value of Lithuanian enterprises by their size in 2007-2020, billion Euros Source: compiled by the author according to the data of the Lithuanian Department of Statistics.

Lithuanian SMEs generate about two thirds of the added value of all non-financial businesses: The added value created by SMEs accounted for 65 percent in 2007, and in 2015-2020 the share of value added of SMEs increased to 66 percent. Almost half of the total added value generated by SMEs in 2007 went to medium-sized enterprises (45.2 percent), slightly more than a third to small enterprises (34.6 percent) and about a fifth (20.2 percent) to micro-enterprises.

In 2020 the share of added value generated by micro-enterprises increased by more than 1.4 times to 29.1 percent of the total added value generated by SMEs at the expense of the added value generated by medium and small enterprises, as their share of added value in 2020 respectively decreased to 37.9 percent and 32.4 percent. In 2020 almost, a quarter of the added value generated by SMEs went to wholesale and retail trade and repair of motor vehicles and motorcycles (24.3 percent), slightly less than a fifth to manufacturing (18.5 percent), slightly more than a tenth - transport and storage (11.4 percent) and construction activities (10.4 percent). SMEs owned on average 76 percent each added value generated by wholesale and retail trade and repair of motor vehicles and motorcycles, on average 54 percent manufacturing and an average of 57 percent added value generated by transport and storage activities.

The number of persons employed in Lithuanian non-financial enterprises includes the number of employees of enterprises, owners of sole proprietorships and natural persons engaged in economic activities. Three quarters of all Lithuanian non-financial business employees works in SMEs: in 2007-2008 SMEs employees accounted for 76 percent of all employees, and in 2018-2020 – 75 percent. The largest share of SMEs employees works in micro-enterprises - on average 37 percent, slightly less in small and medium-sized enterprises (32percent and 31percent respectively) (Figure 5). The number of people employed in micro-enterprises has been growing faster every year, and the growth rate in the number of people employed in small and medium-sized enterprises has been slower.



Figure 5 – Number of employed in Lithuania by size of enterprises in 2007-2020, thous. of persons Source: compiled by the author according to the data of the Lithuanian Department of Statistics.

The largest number of employees in the Lithuanian non-financial business is concentrated in wholesale and retail trade and repair of motor vehicles and motorcycles, manufacturing, construction and transport and storage activities. In 2020 more than a fifth of all employees in Lithuania worked in wholesale and retail trade and repair of motor vehicles and motorcycles (21.5 percent). However the number of employees in SMEs in this area decreased by as much as 31.14 percent (Figure 6).

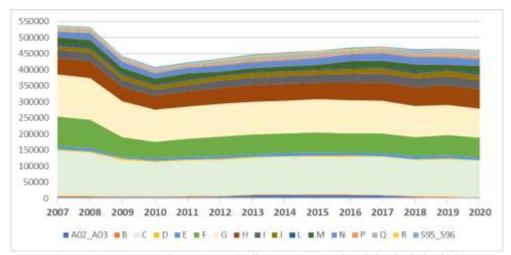


Figure 6 – Number of employees in SMEs by type of activity in 2007-2020

Source: compiled by the author according to the data of the Lithuanian Department of Statistics.

Forestry and fishing (A02_A03), Mining and quarrying (B), Manufacturing (C), Electricity, gas, steam and air conditioning supply (D), Water supply, sewerage, waste management and remediation activities (E), Construction (F), Wholesale and retail trade and repair of motor vehicles and motorcycles (G), Transport and storage (H), Accommodation and food service activities (I), Information and communication activities (J), Professional, scientific and technical activities (M), Administrative and support service activities (N), Education (P), Human health and social work activities (Q), Arts, entertainment and recreation activities (R), Repair of computers and personal and household goods and other personal service activities (S95_S96)

In manufacturing enterprises in 2020 worked 19.77 percent of all employees, from 2007 their number decreased by 11.55 percent, and the number of employees in SMEs in this area decreased by as much as 19.54 percent. The number of employees in construction enterprises since 2007 also decreased (15.31 percent) and in 2020 accounted for 10.37 percent of the total number of employees, and the number of employees in SMEs in this area decreased by as much as 32.43 percent. In enterprises engaged in transport and storage activities, the number of persons employed since 2007 increased by 59.41 percent and in 2020 accounted for 14.18 percent. The number of people working in this field in SMEs since 2007 until 2020 increased by 19.34 percent. The number of employees in SMEs in 2007-2020 increased by more than 80 percent in education and health care and social work, but their share in total employment in 2020 accounted for only 2.1 percent. SMEs have a significant impact on employment, job creation and social stability.

Gross investment in tangible fixed assets is a very important indicator for companies. These investments consist of purchased, reconstructed, repaired tangible fixed assets during the year and manufactured, built (repaired) assets of the company itself and used for its own needs. Although in 2007-2020 the largest share of gross investment in tangible fixed assets in the economy was accounted for by investments of SMEs (71.47 - 65.29 percent), however there are different changes in the structure of gross investment in tangible goods after the global economic crisis of 2008-2009 and the COVID-19 pandemic. However, different changes in the structure of gross investment in tangible goods have been observed since 2008-2009 during the global economic crisis and the COVID-19 pandemic.

In 2010 the percentage of these investments by SMEs compared to 2007 decreased by 10.07 percent points and amounted to 61.40 percent, however during COVID-19 pandemic an opposite trend is emerging- in 2020 the share of SMEs' total investment in tangible assets in the economy increased by 4.47 percent points and accounted for 65.29 percent from the total investment. Although the structure of gross investment in tangible fixed assets in the economy did not fluctuate significantly, in 2007-2020 gross investment in tangible goods in the economy changed over the period. In 2009 investments in SMEs have more than halved, i. e. actually 53.10 percent, while large companies account for 38.86 percent. The highest rate of decrease was in small enterprises (10-49 employees) - 60.89%, while in very small enterprises (1-9 employees) - 48.04 percent. A different pace of change emerged in 2020, as the rate of decline in SMEs' gross investment in tangible goods, which stood at

13.00%, was 2.17 times slower than that of large enterprises (250 and more employees). Assessing SMEs, the situation was more favorable in very small (1-9 employees) and small (10-49 employees) companies, where the rate of decline in gross investment was slightly more than 10 percent.

Gross investment in tangible goods per employee in 2009 in SMEs decreased by 44.81 percent (the fastest rate of decrease (54.42percent) was in small (10-49 employees) companies, while in large companies (250 and more employees) - 26.20 percent. The situation was similar in these companies in 2020, when these investments decreased by 27.53percent. The assessment of SMEs shows that the situation in 2009 and 2020 differs quite significantly. In 2009 the largest amount of gross investment per employee was in micro-enterprises – however in 2020 in medium-sized enterprises (Figure 7).

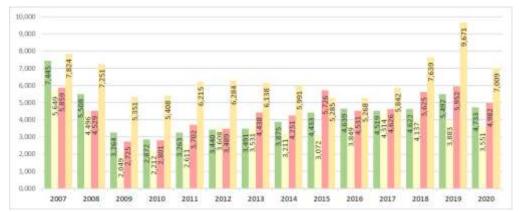


Figure 7 – Gross investment in tangible goods per employee

Source: compiled by the author according to the data of the Lithuanian Department of Statistics.

The rate of decline in gross investment in tangible goods per employee in 2020 was 3.24 times slower than in 2009 and 2.1 times slower than in large companies. The most favorable situation in small enterprises (10-49 employees), where gross investments in tangible fixed assets per employee decreased by 8.56 percent. If the company is unable to meet its property obligations in a timely manner or the liabilities exceed the value of its assets, the company is considered insolvent. However, bankruptcy is not the only solution left for an insolvent company. First, the company may be restructured. The main purpose of the restructuring is to settle with creditors and avoid the company's bankruptcy. According to the data provided by the Audit, Accounting, Property Valuation and Insolvency Management Service under the LRFM, in 2007-2020. Restructuring processes were initiated in 505 companies (Figure 8).

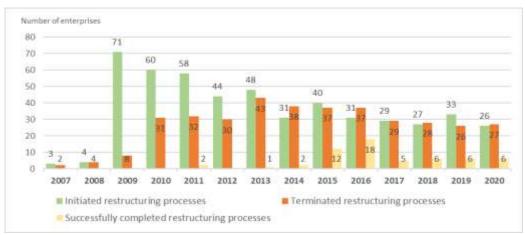


Figure 8 – Number of restructuring processes initiated, successfully completed and terminated (number of enterprises)

Source: Compiled by the author according to the data of the Audit, Accounting, Property Valuation and Insolvency Management Service under the Lithuanian Ministry of Finance

Since 2010 the number of companies starting the restructuring process has been declining almost every year. It can be observed that only a small number of companies successfully complete the restructuring and restore their solvency. During the period of 2007-2020, only 58 companies successfully completed the restructuring, which is 11.49 percent of companies that started the process during this period. In 2020

restructuring plans for 23 companies were approved and the number of restructuring processes initiated, terminated and successfully completed was similar to the pre-pandemic ones in 2017-2019.

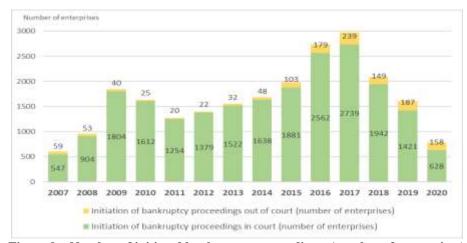


Figure 9 – Number of initiated bankruptcy proceedings, (number of enterprises)

Source: Compiled by the author according to the data of the Audit, Accounting, Property Valuation and Insolvency Management Service under the Lithuanian Ministry of Finance

In 2007-2020 bankruptcy proceedings were initiated against 23,147 companies (Figure 9). Most bankruptcy proceedings were initiated in 2016-2017, when the State Tax Inspectorate and State Social Insurance Fund Board under the Ministry of Social Security and Labor actively initiated bankruptcies of long-established, heavily indebted companies without assets. The lowest number of bankruptcies started in 2007, when the global economic crisis had not yet started in 2008-2009. In 2020 the number of bankruptcies decreased and almost returned to 2007 level. In 2020 two quarantines were announced in Lithuania, during which companies faced various operating restrictions. It seemed that in 2020 the number of bankruptcy proceedings was expected to rise to the level of 2017, but the opposite occurred (Table 2).

Such good performance during the COVID-19 pandemic was largely driven by state aid to enterprises. In 2020 April 21 a law on the effects of COVID-19 on the insolvency of legal persons was adopted which foresees that the obligation of the head of the company to apply to the court for the initiation of bankruptcy proceedings or the initiation of bankruptcy proceedings out of court shall not apply during quarantine and for 3 months after quarantine Creditors' ability to file for bankruptcy was limited during the quarantine period. Although the first quarantine ended in 2020 in June however, the measures were extended until September and on 7 November the quarantine was announced for the second time. The short period between quarantines helped companies keep their businesses afloat. The decrease in the number of bankruptcy proceedings was also influenced by the tax benefits and support provided to companies.

Each year, the majority of deregistered companies are small and medium-sized enterprises. A particularly large number of small and medium-sized enterprises (17,982 enterprises) were deregistered in 2016, when the managers of the Register of Legal Entities deregistered enterprises whose bankruptcy process had lasted for more than 10 years. (Figure 10).

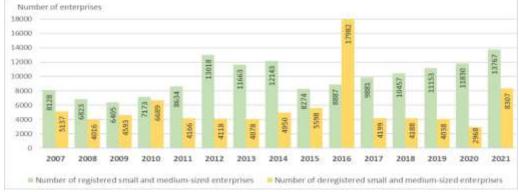


Figure 10 – Number of registered and deregistered small and medium-sized enterprises, (number of enterprises)

Source: compiled by the author according to the data of the Lithuanian Department of Statistics.

When analyzing the number of companies deregistered during the year, it is appropriate to compare it with the number of companies registered in that year. In 2020 the indicators of newly registered and deregistered SMEs can be called gratifying, as compared to 2019 when there were registered 6.07 percent more, and 26.5 percent fewer companies were deregistered. However, in 2021 the indicators deteriorated sharply: only 1376 enterprises were registered, the smallest number during the analyzed period, and as many as 8307 enterprises were deregistered, mostly during the analyzed period (excluding 2016). In 2021 the number of small and medium-sized enterprises was deregistered almost three times (179.89 percent) more than in 2020 and more than twice (105.72 percent) than in the pre-pandemic 2019. It can be argued that the wave of business closures predicted by the COVID-19 pandemic in the SME sector began in 2021.

Based on the analysis of the annual indicators of the business structure of the impact of the global financial crisis, the impact of the COVID-19 pandemic on business is modelled. The analysis of SMEs and its environment raises questions about the changes in SMEs in the country during the COVID-19 pandemic and analyzes the resilience of SMEs to short-term and long-term shocks to aggregate supply and aggregate demand. Analyzing the changes in Lithuania's real GDP, unemployment rate and SMEs during the last 16 years, it can be seen that the country's economy experienced not only rapid growth in 2007the country's economic growth (11.11 percent), but also two recessionary periods – in 2009 the economic crisis triggered by the financial and economic crisis in the United States in 2008; in the fall and in 2019. The COVID-19 pandemic began at the end of 2006 (Figure 11).

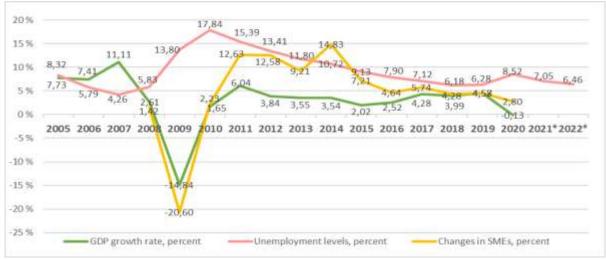


Figure 11 – Lithuania's real GDP growth rate, unemployment levels and the changes in SMEs given in percent 2005 – 2020

Source: Compiled by the author according to the data of the Lithuanian Department of Statistics.

The global financial crisis has shown that SMEs were not ready to face the challenges ahead. In 2009 the largest change was in micro-enterprises (down 21.42 percent). The decline in enterprises led to changes in the labor market, with the number of persons employed in non-financial enterprises declining by 15.53 percent (160 132 persons), and the total unemployment rate in the country in 2009 soared to 13.8 percent, the largest changes in the labor market were in medium-sized enterprises and large enterprises, and the number of employed persons in these business structures decreased by 91,307, which makes up 57 percent of redundancies in non-financial enterprises or one in six employees became unemployed. Assessing the 2020 Macroeconomic and business indicators of the Republic of Lithuania in the context of the COVID-19 pandemic and the restriction of economic activities, it can be observed that businesses were able to assess the ongoing changes, rethink the business model and its operating principles and adapt to the changing environment (see Table 2).

This may have been due to the following factors:

- Experience in business management during the global financial crisis;
- Business digitization and introduction of new technologies;
- · Diversification of the company's activities and operating principles;
- Effective financial support of the Government of the Republic of Lithuania for business.

Table 2. Changes in business indicators during the global financial crisis and COVID-19

	business indicators during the global fin	unciai crisis ana co vid i
Variable	Global Financial Crisis (2008-2009)	COVID-19 Pandemic (2019-2020)
Operating non -fin. number of companies	Decreased by 33455 companies (-20.60 %)	Increased by 7571 companies (2.79 %)
Very small companies	Decreased by 31162 companies (-21.42 %)	Increased by 11588 companies (3.12 %)
Small companies	Decreased by 1732 (-12.57 %)	Decreased by 325 companies (-2.57 %)
Medium-sized companies	Decreased by 486 companies (-17.48 %)	Decreased by 122 companies (-2.57 %)
Large companies	Decreased by 75 companies (-17.48 %)	Decreased by 122 companies (-3.27 %) Decreased by 2 companies (-0.01 %)
Turnover (non-fin companies), thous.	Decreased by 20,471,937 thousand EUR	Decreased by 1 425 029 thousand EUR
EUR	(-30.22 %)	(-1.41 %)
Very small companies		Increased by 295 588 thousand EUR (1.54 %)
Small companies	Decreased by 2,389,143 thousand EUR (-27.36 %) Decreased by 521, 9881 thousand EUR (-33.63 %)	Decreased by 245,721 thousand EUR (-1.03 %)
Medium-sized companies	Decreased by 6,001,531 thousand EUR (-32.02 %)	Decreased by 243,721 thousand EUR (-1.03 %) Decreased by 644,317 thousand EUR (-2.70 %)
Large companies	Decreased by 6,001,331 thousand EUR (-32.02 %) Decreased by 6 661 380 thousand EUR (-27.73%)	Decreased by 830 580 thousand EUR (-2.41 %)
	Decreased by 2 136,702 thousand EUR	Increased by 1,004,431 thousand EUR
Gross operating profit (non-financed	(-41.59 %)	(9.50 %)
companies) thous. EUR Number of employed persons (non-	(-41.59 %)	(9.50 %)
financed companies)	Decreased by 160,132 persons (-15.53 %)	Increased by 200 persons (0.018 %)
	Decreased by 20,000 marsons (12,21.0/)	Increased by 12 626 marsons (2.02.0/)
Very small companies	Decreased by 30,090 persons (-12.31 %)	Increased by 13,626 persons (3.93 %)
Small companies	Decreased by 38,735 persons (-14.19 %)	Decreased by 5,174 persons (-2.07 %)
Medium-sized companies	Decreased by 49,401 persons (-18.35 %)	Decreased by 5620 persons (-2.42 %)
Large companies	Decreased by 41,906 persons (-17.16 %)	Decreased by 2,632 persons (-0.93 %)
Value added at production costs (non-	Decreased by 4,134,243 thousand EUR	Increased 1,417,935 thousand EUR (5.897 %)
financed companies) thous. EUR	(- 31.02 %) Decreased by 682796 thousand EUR (-38.56 %)	(-)
Very small companies	` ′	Increased by 298858 thousand EUR (6.49 %)
Small companies	Decreased by 1124178 thousand EUR (35.92 %)	Increased by 366655 thousand EUR. (7.07 %)
Medium-sized companies	Decreased by 1258657 thousand EUR (31.36 %)	Increased by 390538 thousand EUR (6.51 %)
Large companies	Decreased by 1068612 thousand EUR (24.20 %)	Increased by 361885 thousand EUR (4.38 %)
Production value (non-finan.	Decreased by 14,360,066 thousand EUR	Decreased 965 792 thousand EUR
companies), thous. EUR	(- 31.83 %)	(-1.47 %)
Very small companies	Decreased by 1 595 905 thousand EUR (27.61 %)	Increased by 178370 thousand EUR (1.47 %)
Small companies	Decreased by 3048310 thousand EUR (33.66 %)	Increased by 295799 thousand EUR (2.24 %)
Medium-sized companies	Decreased by 3902604 thousand EUR (31.62%)	Decreased by 122498 thousand EUR (0.76 %)
Large companies	Decreased by 5813245 thousand EUR (32.43 %)	Decreased by 1317 463 thousand EUR (5.40 %)
Gross investment in tangible goods (non-finan. companies), thous. EUR	Decreased 2702483 thousand EUR (48.58 %)	Decreased 1326200 thousand EUR (18.96 %)
Very small companies	Decreased by 646907 thousand EUR (48.04 %)	Decreased by 198867 thousand EUR (10.43 %)
Small companies	Decreased by 747349 thousand EUR (60.89 %)	Decreased by 101325 thousand EUR (10.46 %)
Medium-sized companies	Decreased by 620060 thousand EUR (50.86 %)	Decreased by 252941 thousand EUR (18.33 %)
Large companies	Decreased by 688168 thousand EUR (38.86 %)	Decreased by 773066 thousand EUR (28,20 %)
Gross investment in tangible goods	, , , ,	
	D 11 444 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Decreased by 1,194 thousand EUR (18.97 %)
per employee (non-financed	Decreased by 2,111 thousand EUR (39.11 %)	Decreased by 1,124 mousand Bert (10.27 70)
per employee (non-financed companies), thous. EUR	Decreased by 2,111 thousand EUR (39.11 %)	becreased by 1,124 mousand Box (10.27 70)
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companies), thous. EUR Very small companies Small companies Medium-sized companies	Decreased by 2,244 thousand EUR (40.75 %) Decreased by 2,447 thousand EUR (54.42 %) Decreased by 1,803 thousand EUR (39.82 %)	Decreased by 0.759 thousand EUR (13,82 %) Decreased by 0.333 thousand EUR (8.56 %) Decreased by 0.970 thousand EUR (16.30 %)
companies), thous. EUR Very small companies Small companies Medium-sized companies Large companies Gross investment in machinery,	Decreased by 2,244 thousand EUR (40.75 %) Decreased by 2,447 thousand EUR (54.42 %) Decreased by 1,803 thousand EUR (39.82 %) Decreased by 1,900 thousand EUR (26.20 %)	Decreased by 0.759 thousand EUR (13,82 %) Decreased by 0.333 thousand EUR (8.56 %) Decreased by 0.970 thousand EUR (16.30 %) Decreased by 2,662 thousand EUR (27.53%)
companies), thous. EUR Very small companies Small companies Medium-sized companies Large companies Gross investment in machinery, equipment, vehicles and inventory	Decreased by 2,244 thousand EUR (40.75 %) Decreased by 2,447 thousand EUR (54.42 %) Decreased by 1,803 thousand EUR (39.82 %) Decreased by 1,900 thousand EUR (26.20 %) Decreased by 1,318,623 thousand EUR	Decreased by 0.759 thousand EUR (13,82 %) Decreased by 0.333 thousand EUR (8.56 %) Decreased by 0.970 thousand EUR (16.30 %) Decreased by 2,662 thousand EUR (27.53%) Decreased 896,700 thousand EUR
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Summarizing the impact of the COVID-19 pandemic, several overarching trends can be identified:

- 1. During the COVID-19 pandemic there was an increase of 2.79 percent in the number of operating non-financial enterprises, which was due to the growth of micro-enterprises.
- 2. The number of medium-sized enterprises (3.27 percent) had the largest negative impact on the number of operating non-financial enterprises.
- 3. The structure of business enterprises according to the size is dominated by micro-enterprises (0-9 employees), they make up 94.6 percent (share of non-financial enterprises operating in Lithuania in general, 2020). It can be said, that business enterprises in Lithuania are getting shrinking.
- 4. As the number of micro-enterprises increases, so does the number of people working in them i. e. 13,626 persons (3.93 percent).
- 5. 5. After analyzing the data provided by the Lithuanian Department of Statistics (Figure 6), it was established that the largest share of GDP was accounted for by manufacturing (C) and wholesale and retail trade; repair of motor vehicles and motorcycles (G), transport and storage and construction. It should be noted that the share of these sectors in the structure of GDP remained stable during the financial crisis and COVID-19.
- 6. During the COVID-19 pandemic, there is a clear trend in the added value of 5.9 percent of non-financial enterprises in terms of production costs and the largest part of this increase was due to the increase in value added in small enterprises (7.1 percent), in micro-enterprises and medium-sized enterprises by 6.5% each. As the increase in added value is greater than the increase in the share of employees, this indicates that these business structures are operating efficiently.
- 7. During the COVID-19 pandemic, the rate of decline in corporate gross investment in tangible goods (18.96 percent) was 2.56 times slower than during the global financial crisis.
- 8. One of the reasons for this may be the growing number of operating non-financial enterprises. The situation was most favorable in micro-enterprises (their number increased during this period) and small enterprises, where the rate of decline in gross investment was about 10.4 percent.
- 9. Micro and small enterprises have been effective during the COVID-19 pandemic, as the value added of production costs and the value of production have increased as the total investment in tangible fixed assets and the per capita investment of enterprises has decreased. The situation is most favorable in small enterprises, as with the decrease in the number of enterprises and employees (2.57percent and 2.07percent, respectively), the value added of gross investment in tangible fixed assets (10.4 percent) and value added at production costs increased the most (2.24 percent and 7.07 percent, respectively).
- 10. In 2009 bankruptcy proceedings were initiated against 1,844 companies, which is 92.69 percent more bankruptcies than in 2008. If in 2008 on average, 80 companies started bankruptcy proceedings per month in 2009 154 companies, in 2020 66 companies. Insufficient experience of the authorities and lack of financial reserves led to the bankruptcy of a large number of companies during the economic crisis.
- 11. The number of companies undergoing restructuring increased rapidly during the global financial crisis. Restructuring of 71 companies was started in 2006, as much as 1675.00 percent more than in 2008. Meanwhile, during the COVID-19 pandemic, restructuring was initiated by 26 companies, or 21.21 percent less than in 2019.

V.CONCLUSIONS

1. Micro-enterprises account for the largest share of all non-financial enterprises operating in Lithuania, and their share in the total number of operating enterprises has been growing steadily every year, while the share of small and medium-sized enterprises has been gradually declining. The number of large companies in the number of all companies operating in Lithuania is very small, less than one percent. The number of SMEs in the fields of wholesale and retail trade and repair of motor vehicles and motorcycles, professional, scientific and technical activities, construction, transport and storage, and manufacturing is more than 99 percent. Repair of computers and personal and household goods and other personal service activities are wholly owned by SMEs. In the mentioned fields, micro-enterprises account for 86 percent and more of the number of enterprises in each activity. The turnover of Lithuanian non-financial corporations in 2020, compared to 2007, increased 1.66 times. SMEs and even micro-enterprises made a significant impact on the overall economic performance: in the 2007-2020 period the growth rates of turnover of SMEs and micro-enterprises were higher than those of other economic entities and had a pivotal impact on the positive changes in the turnover of all businesses. Lithuanian SMEs generate a significant share of gross domestic product: about two thirds of the added value of all nonfinancial businesses. In 2020 medium-sized enterprises accounted for more than a third of total SME added value. SMEs account for more than three quarters of added value in wholesale and retail trade and repair of motor vehicles and motorcycles, and more than half in added value in manufacturing, transport and storage.

SMEs have a significant impact on the employment, job creation and social stability of the Lithuanian population: three-quarters of all non-financial employees in Lithuania work in SMEs, most of them work in micro-enterprises - more than a third. Since 2007 the number of people employed in micro-enterprises has been growing rapidly every year, while the growth rate of the number of people employed in small and medium-sized enterprises has been slower.

2. Assessing the 2020 macroeconomic and business indicators of the Republic of Lithuania in the context of the COVID-19 pandemic and the restrictions of economic activities, it can be observed that businesses have been able to assess ongoing changes, reconsider their business(enterprise) model and operating principles and adapt to the changing environment. This was due to the experience of business management gained during the global financial crisis, the digitization of business and the introduction of new technologies, the diversification of the company's activities and operating principles, and the effective financial support of the Government of the Republic of Lithuania for business.

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