

IMPACT OF THE COVID-19 PANDEMIC ON THE ENTREPRENEURIAL ECOSYSTEM OF THE REPUBLIC OF MOLDOVA: IMPLICATIONS FOR SMES

IMPACTUL PANDEMIEI COVID-19 ASUPRA ECOSISTEMULUI ANTREPRENORIAL AL REPUBLICII MOLDOVA: IMPLICAȚII PENTRU IMM-URI.

Natalia VINOGRADOVA¹

Abstract

The COVID-19 pandemic, which the entire world faced in 2020, has seriously affected all areas of society, including the economy. In the Republic of Moldova, the consequences of the suspension of economic activity during the state of emergency (from May 15 to September 30, 2020 with subsequent repeated extensions), as well as subsequent measures, negatively affected the performance of enterprises in most sectors, tens of thousands of citizens lost their jobs. In these conditions, the small and medium-sized (SME) sector is the most vulnerable.

The paper provides a brief analysis of the main components of the entrepreneurial ecosystem of the Republic of Moldova, taking into account the impact of the COVID-19 pandemic and the subsequent actions of the state in order to slow the spread of the epidemic. In addition, a survey of entrepreneurs carried out within the project "Multidimensional assessment and development of the entrepreneurial ecosystem at national and regional level in order to boost the SME sector in the Republic of Moldova" (code 20.80009.0807.38) made it possible to assess the impact of the Covid-19 Pandemic on the SME sector in the Republic of Moldova.

Key words: entrepreneurship, entrepreneurial ecosystem, SMEs, entrepreneurship development policy, Covid-19 Pandemic, Republic of Moldova.

JEL Classification: L26, D04

1. Entrepreneurial ecosystem and its components

Entrepreneurial activity plays a key role in the socio-economic development of the country: enterprises produce goods and services, create jobs, bring income to the state budget, ensuring economic growth and increasing the well-being of citizens. The development of entrepreneurship in a country and its competitiveness directly depend on external conditions, which include a wide range of components and are usually defined by such concepts as the business environment, investment climate, and more recently, by the concept of an entrepreneurial ecosystem.

Currently, there is no single definition of an entrepreneurial ecosystem. For example, James F. Moore, who introduced the term "ecosystem" into the economy, defined it as an economic system that includes companies, which "co-evolve around a new innovation, working cooperatively and competitively to support new products and satisfy customer needs" [10]. Daniel Isenberg, founder of the Babson Entrepreneurship Ecosystem Project (BEEP), presented his understanding of the entrepreneurial ecosystem as is a dynamic, self-regulating network of many different types of actors that contribute to the development of entrepreneurship in their region [8]. Eric Stam and Ben Spigel defined the entrepreneurial

¹ PhD, Associate Professor, National Institute for Economic Research of the Republic of Moldova, email: vinogradova@mail.ru

ecosystem as "a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship within a particular territory" [13].

In every country or region where entrepreneurship exists, the environment contributes to the formation of ecosystems. For entrepreneurship to thrive, there should be applied a holistic approach to the ecosystem. The components of the entrepreneurial ecosystem cover all areas that have an impact on entrepreneurship. Thus, D. Eisenberg's model identifies six areas that are present in the ecosystem: politics, financial capital, culture, support infrastructure, human capital and markets.

In 2020-2021, one of the key factors affecting the entrepreneurial ecosystem was the COVID-19 pandemic and subsequent government actions to slow the spread of the epidemic. Further, the article briefly presents the main components of the entrepreneurial ecosystem in the Republic of Moldova, such as politics, finance, infrastructure, human capital, enterprises and entrepreneurial networks, and also illustrates the impact on them of the situation related to the pandemic. In the Republic of Moldova, the concept of an entrepreneurial ecosystem, although present in some reports, is not widely disseminated and little researched. Assessment of individual components of the entrepreneurial ecosystem requires a large amount of baseline data, both quantitative and qualitative, some of which are currently not available in Moldova. The following sources of information were used as the initial data for the analysis:

- a) Information from the National Bureau of Statistics of the Republic of Moldova and the Agency of Public Services;
- b) Results of the scientific project "Multidimensional assessment and development of the entrepreneurial ecosystem at national and regional level in order to boost the SME sector in the Republic of Moldova" (code 20.80009.0807.38) and other studies;
- c) International ratings.

2. Politics.

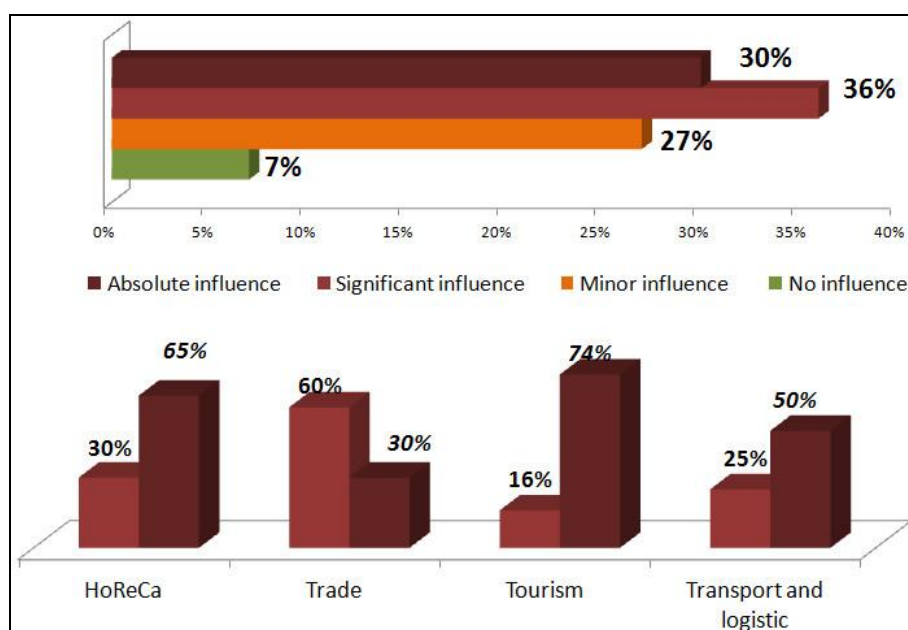
One of the main elements of the entrepreneurial ecosystem in emerging economies is entrepreneurship development and support policy. This policy in any country, including the Republic of Moldova, is based on 3 components: laws; program documents; state institutions. The main law regulating business development in the Republic of Moldova is Law No. 845 on Entrepreneurship and Enterprises, adopted in 1992, which, despite many changes, symbolizes the stability of the legislation in the field of entrepreneurship. Considering that more than 98% of all enterprises in the Republic of Moldova belong to the small and medium-sized enterprises (SME) sector, the emphasis in public policy is usually placed on supporting SMEs. In 2016, a new Law No. 179 on Small and Medium-sized Enterprises was adopted, which provides for a number of significant changes in support of SMEs. The definition of SMEs adopted in 2016 is in line with the practice of the European Union and the international community. Such criteria as number of employees, turnover and total assets are used to determine whether a company is a micro, small or medium-sized enterprise. Employment criteria are consistent with the EU definition, however, the thresholds for turnover and assets in Moldova are significantly lower, reflecting the lower income per capita in the country (Table 1).

Table 1. Definition of micro, small and medium-sized enterprises in the Republic of Moldova

<i>Defining criteria</i>	<i>Micro</i>	<i>Small</i>	<i>Medium</i>
Number of employees	< 10 persons	< 50 persons	< 250 persons
Annual turnover	< 9 million MDL (460 thousand EUR)	< 25 million MDL (1,28 million EUR)	< 50 million MDL (2,56 million EUR)
Total assets	< 9 million MDL (460 thousand EUR)	< 25 million MDL (1,28 million EUR)	< 50 million MDL (2,56 million EUR)

Source: [9].

The effects of the shutdown of economic activity during the state of emergency were acutely felt by most sectors for which direct interaction with the customer is key. Data on the impact of the COVID-19 pandemic on the entrepreneurial ecosystem in the Republic of Moldova today can be obtained from surveys of business owners. Thus, the results of a survey conducted in August 2020 by the American Chamber of Commerce in Moldova (AmCham) indicate the negative effect of measures taken during the emergency on enterprises. Thus, 66% of the interviewed entrepreneurs indicated that the operating conditions established by the National Emergency Commission for Public Health had a significant or absolute negative impact on them. Sectors such as HoReCa, trade, tourism, transport and logistics were particularly affected (Figure 1)

**Figure 1. Negative impact of the operating conditions established by the National Emergency Commission for Public Health in 2020 in Moldova**

Source: [1].

The governing bodies developed and took measures to facilitate doing business in the new environment. For example, the steps provided by the Roadmap are being implemented to accelerate the process of digitizing the national economy and the development of e-commerce; identified solutions that will contribute to the development of sectors of the economy affected by COVID - "COVID matrix" - recovery measures for the affected sectors (developed by the Economic Council to the Prime Minister) [3].

3. Financial resources.

Difficult access to financial resources in the Republic of Moldova is one of the leading obstacles faced by the entire SME sector. This is supported by research conducted by the National Institute for Economic Research and other organizations.

The financial market in the Republic of Moldova consists of banking and non-banking organizations. Banking institutions are represented by 11 licensed commercial banks (data from 2019), whose activities are regulated by the National Bank, and the non-banking sector consists of microfinance institutions (as of the end of 2019: 166 registered units with 496,700 beneficiaries) and savings and loan associations (as of the end of 2019: 173 registered units with 40,650 borrowers). Leasing is not the main source of business financing (Figure 2).



Figure 2. The structure of the corporate lending sector in Moldova

Source: [2].

In Moldova, government programs, which include the financial support, are being implemented, targeting relatively small segments of business. The main programs currently being implemented by the Organization for Small and Medium Enterprises Sector Development (ODIMM) are as follows:

- 1) The program to attract remittances to the economy (PARE 1+1), designed to attract investment and remittances to rural development through the creation and development of small and medium-sized enterprises. The program works according to the “1+1” principle: for each MDL invested in business from funds earned abroad, 1 MDL from the state is added.
- 2) National program "Start for Youth: Sustainable Business at Home".
- 3) The Women in Business Program.
- 4) The program for greening SMEs. [11]

A Loan Guarantee Fund, which is also managed by ODIMM, was created and capitalized from the state budget. The purpose of its work is to facilitate the access of micro and small enterprises to credit resources, which are intended to improve the production capacities of enterprises, as well as to improve the quality of services provided.

The degree of accessibility of financial resources for Moldovan enterprises can be assessed on the basis of the “Financial System” component of the Global Competitiveness Index. Despite a slight improvement in the analyzed indicators in 2019, the Republic of Moldova is below the world average and occupies the last places in the ranking (Table 2).

Table 2. Some Indicators characterizing access to financial resources based on the Global Competitiveness Report 2018-2019

Indicators, UOM		2018, 140 countries	2019, 141 countries	Change
Domestic credit to private sector, % GDP	Value	34.1	30.7	-3.4
	Rank	92	99	-7
Financing of SMEs, 1–7 (best)	Value	3.3	3.6	0.3
	Rank	111	93	+18
Venture capital availability, 1–7 (best)	Value	2.2	2.5	0.3
	Rank	121	116	+5
Soundness of banks, 1–7 (best)	Value	2.9	3.4	0.5
	Rank	134	127	+7
Non-performing loans, % of gross total loans	Value	16.4	18.4	2
	Rank	122	130	-8
Cost of starting a business, % of GNI per capita	Value	5.6	5	-0.6
	Rank	62	60	+2

Source: [15].

The COVID-19 pandemic has increased the severity of the problem of access to finance for enterprises in Moldova. According to the SME Map compiled by the Small Business Alliance of Moldova based on a survey of entrepreneurs, in September 2020, only less than a third of enterprises were able to cover their costs, 59% of enterprises are experiencing difficulties in covering costs, and 10% are insolvent or are on the verge of bankruptcy (Figure 3).

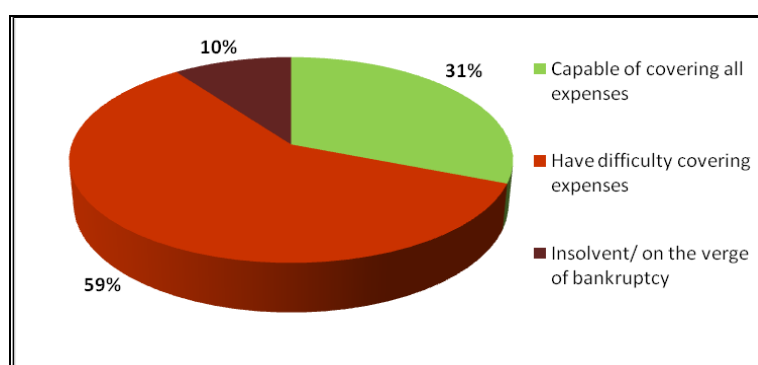


Figure 3. The impact of the pandemic COVID-19 on the access of enterprises to financial resources

Source: [4].

4. Infrastructure.

The infrastructure component of the entrepreneurial ecosystem consists of physical infrastructure and business support institutions. The state of the physical infrastructure (transport, utilities, etc.) strongly influences the development of business. In the Republic of Moldova, the infrastructure is characterized by many problems caused by the degradation of some segments due to lack of investment and insufficiently effective management.

In turn, the business support infrastructure is represented in Moldova by public, private and external donor organizations. The main state organizations that provide services to

entrepreneurs include state administration and control bodies (for example, consultations of tax inspectors), the state agency Organization for SME Sector Development, which implements policy measures, including involving specialists from regional public administration authorities in this activity; business incubators, innovative incubators. Also, such organizations as the Chamber of Commerce and Industry, the Investment Agency, the International Exhibition Center "Moldexpo", business associations have the support for SMEs and the provision of services to business as their goal.

Surveys show that in 2020 the Business Consulting, Legal Services and Auditing sector, while not subject to special restrictions, is also experiencing difficulties due to the pandemic. For 75% of enterprises of this type of activity, incomes decreased (Figure 4).

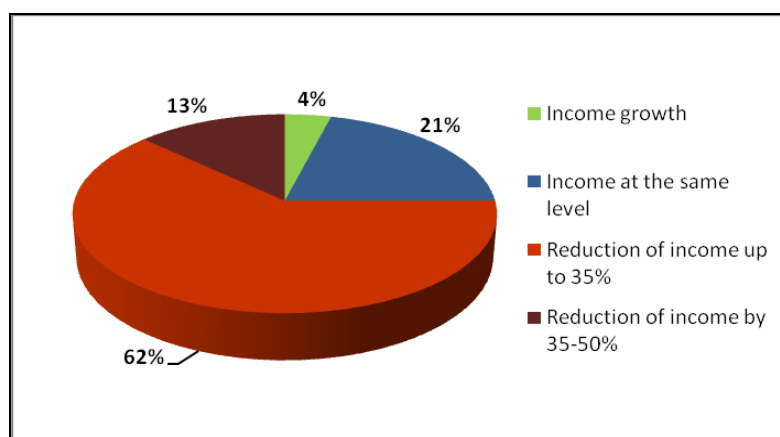


Figure 4. Evolution of revenue in the sector of Business Consulting, Legal Services and Audit during the emergency, compared to the same period in 2019

Source: [4].

To mitigate the economic impact of the pandemic, 63% of enterprises in the Business Consulting, Legal Services and Auditing sector were forced to cut rental and administrative costs, 46% delayed the implementation of planned strategic investments, and 36% - the implementation of ongoing investments (Figure 5).

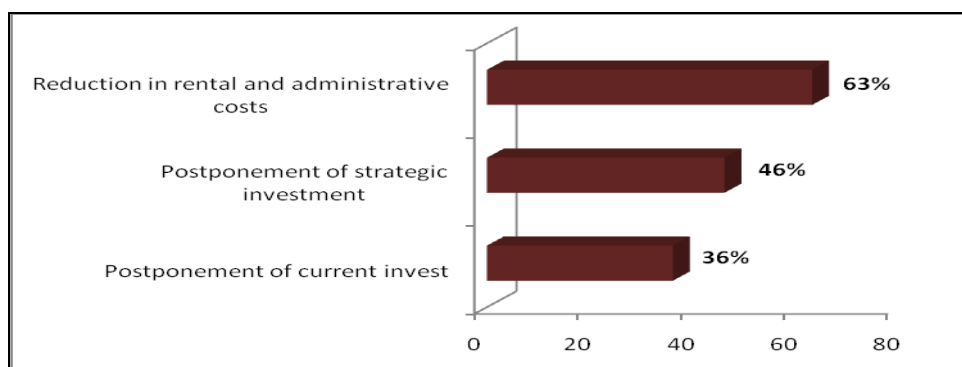


Figure 5. Measures taken by business consulting companies to mitigate the economic impact of the pandemic

Source: [4].

5. Human capital.

Currently, the quality of human capital, in particular, the qualifications of the workforce, does not meet the needs of economic agents: 46% of enterprises experience difficulties in hiring personnel with the necessary skills, and a third of employers believe that gaps and inconsistencies in skills are a significant constraint for business [5]. According to the Enterprise Surveys 2019 [14], among the factors of the business environment, the main obstacle to the development of Moldovan companies of all sizes is an insufficiently qualified workforce (indicated as the most significant obstacle by 20% of surveyed companies: the larger the company size, the more often it was indicated this problem). This problem was ranked first by the respondents and overtook such problems as access to financial resources, tax rates, the influence of the informal sector and political instability. According to the Global Competitiveness Index, the Republic of Moldova, despite improvement in many areas, still occupies low positions in terms of indicators reflecting the component of human resources (Table 3).

Table 3. Some Indicators characterizing human capital and entrepreneurial culture based on the Global Competitiveness Report 2018-2019

Indicators, UOM		2018, 140 countries	2019, 141 countries	Change
Extent of staff training 1–7 (best)	Value	3.4	3.6	+0,2
	Rank	117	112	+5
Quality of vocational training 1–7 (best)	Value	3.4	3.5	+0,1
	Rank	117	114	+3
Skillset of graduates 1–7 (best)	Value	3.5	3.6	+0,1
	Rank	115	106	+9
Digital skills among active population 1–7 (best)	Value	4.4	4.5	+0,1
	Rank	57	55	+2
Ease of finding skilled employees 1–7 (best)	Value	3.2	3.2	0
	Rank	135	136	-1
Entrepreneurial culture 0–100	Value	-	44.7	-
	Rank	-	104	-
Attitudes towards entrepreneurial risk 1–7 (best)	Value	3.7	3.9	+0,2
	Rank	88	80	+8
Willingness to delegate authority 1–7 (best)	Value	3.9	4.2	+0,3
	Rank	103	86	+17
Growth of innovative companies 1–7 (best)	Value	3.2	3.3	+0,1
	Rank	129	129	0

Source: [15].

The OECD, since 2012, has been conducting an assessment of the implementation of the Small Business Act every 2 years, which shows progress in the implementation of the 10 principles of the law and measures compliance with EU practice and standards. According to the OECD report [12], in recent years, specific measures have been taken in cooperation with government agencies and other stakeholders to develop the human capital of entrepreneurs.

Among the achievements in entrepreneurship learning, the OECD report notes the following: (i) a number of actions have been taken to develop key entrepreneurial competencies in primary, secondary and vocational education, but these are still included in specific subjects or elective courses; (ii) in vocational education, including the development and assessment of entrepreneurial skills, an important contribution has been made by the Center for Entrepreneurial Education and Business Assistance (CEDA). At the same time, the field of entrepreneurship education in the Republic of Moldova faces a number of problems, while it is noted that the promotion of entrepreneurship in higher education institutions has not made significant progress.

The 2020 pandemic has had an extremely negative impact on the position of the labor force in the economy of Moldova. Thus, more than 60% of the SMEs, surveyed within the questionnaire of the Alliance of Small and Medium-sized Enterprises on the economic crisis [4], reduced the number of employees (Figure 6).

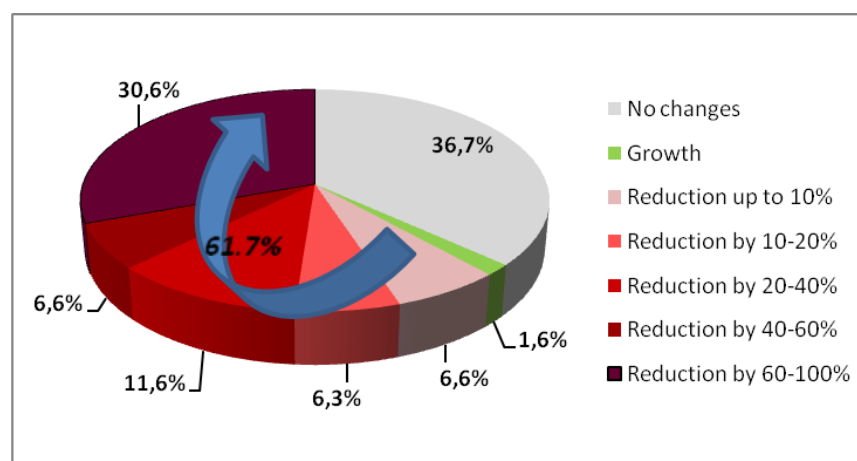


Figure 6. Change in the number of employees of enterprises in September 2020 compared to 01.01.2020

Source: [4].

An analysis, made by the Economic Council to the Prime Minister of the Republic of Moldova in the Report " COVID Matrix", demonstrates that a reduction in staff, sales, as well as a greater exposure to the risk of insolvency and bankruptcy as the result of the COVID-19 pandemic are characteristic of almost all sectors of the economy. The most affected industries, as already mentioned, are tourism, HoReCa, trade (Figure 7).

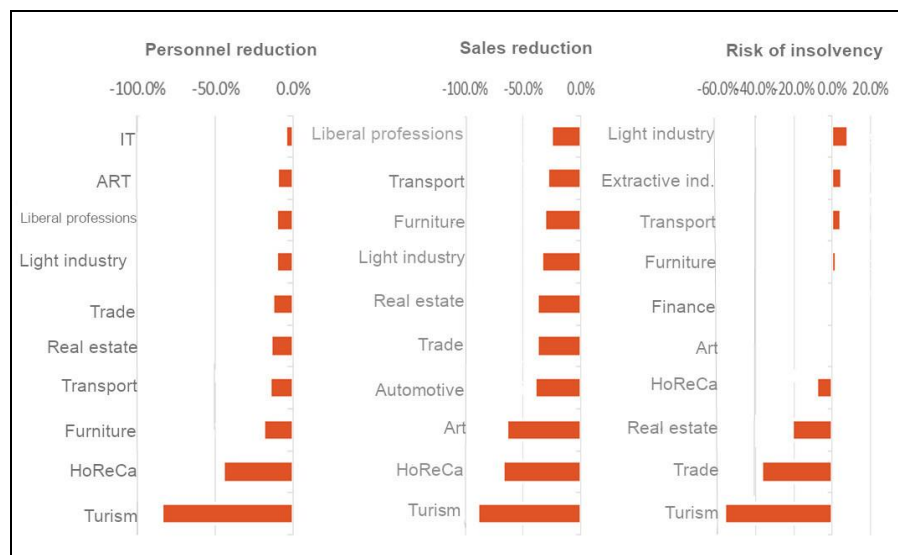


Figure 7. Impact of the COVID-19 pandemic on business performance by industry
Source: [3].

5. Enterprises and entrepreneurial networks.

The main components of the entrepreneurial ecosystem are enterprises and entrepreneurial networks. The demography of enterprises in the Republic of Moldova is characterized by a relatively stable increase in newly registered enterprises and a sharp increase in the number of enterprises excluded from the State Register in recent years (Figure 8). As a result, there is a steady decline in the “net increase in the number of enterprises” indicator.

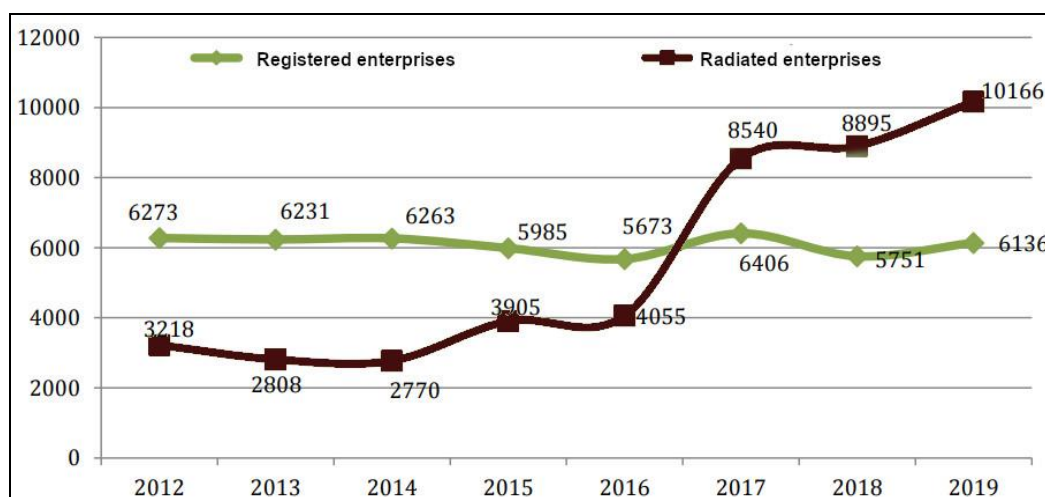


Figure 8. Evolution of registration and liquidation of enterprises from the State Register in the period 2012-2019

Source: [6].

As for entrepreneurial networks as a component of the ecosystem, they include various forms of cooperation and association of entrepreneurs and strengthen the potential of entrepreneurs. However, many entrepreneurs, especially small ones, still do not understand the importance of joining forces; they do not trust the leaders of the associations; they are not

ready to speak openly about their problems and plans; they are not interested in investing time and money in the development of business associations. More than a hundred business associations are officially registered in the Republic of Moldova, but only a part of them are active. They do not interact well with each other, which does not allow the business community to work in a consolidated manner, protecting the interests of all local entrepreneurs. However, there are examples of joining efforts of business associations. For example, the National Confederation of Employers of the Republic of Moldova has been operating for over 20 years; ODIMM has created the National Platform of Women in Moldova; a few years ago, one of the business associations (ICAWB) created an alliance of about 20 regional organizations.

A survey of entrepreneurs, conducted in May 2021 within the framework of the applied research project “Multidimensional assessment and development of the entrepreneurial ecosystem at national and regional level in order to boost the SME sector in the Republic of Moldova” (code 20.80009.0807.38) allowed get an update on the impact of the pandemic on the SME sector. The surveyed sample included 106 enterprises of the SME sector, among which 68.9% were micro-enterprises, 27.4% - small, 3.8% - medium-sized enterprises. By type of activity, 48.1% of the surveyed enterprises belong to the service sector, 17.9% - to agriculture, 16.0% - trade, 15.1% - industry and 2.8% - construction. By region of development, 51.9% of the surveyed enterprises are located in mun.Chisinau, 23.6% - in Center region, 16.0% - in North region, 4.7% - in ATU Gagauzia and 3.8% - in South region; besides, 72.6% of enterprises are located in urban areas and 27.4% - in rural areas.

Thus, the survey showed that the pandemic had a tangible impact on the business of 80.8% of the entrepreneurs surveyed. 63.3% of them assessed the impact of the pandemic as "significant", and 17.3% - as "critical". Only business 3.8% of surveyed entrepreneurs did not feel the impact of the pandemic (Figure 9).

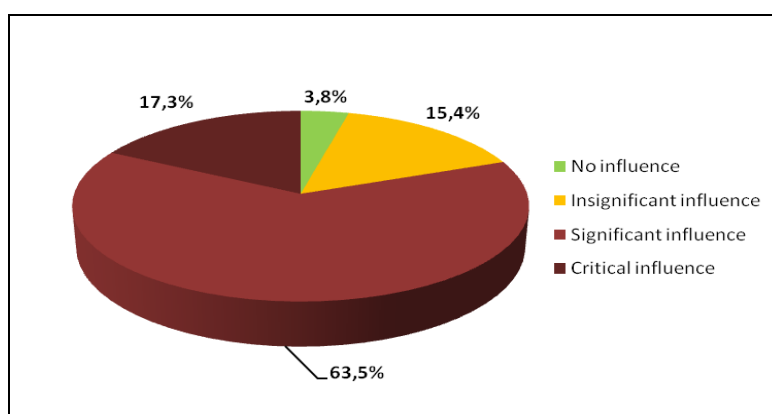


Figure 9. Impact of the Covid-19 pandemic on the surveyed businesses

Source: [7].

Among the enterprises of various types of activity, the strongest negative impact of the pandemic was experienced by manufacturing and trading SMEs, as well as enterprises in the service sector. The pandemic affected agricultural and construction enterprises relatively less (Figure 10).

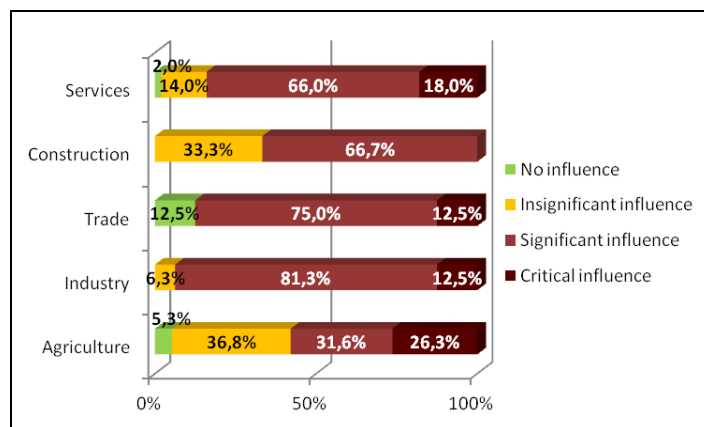


Figure 10. Impact of the Covid-19 pandemic on SMEs, by type of activity

Source: [7].

If we talk about the impact of restrictive measures related to the pandemic on enterprises, depending on their location, then the situation is as follows: a significantly stronger impact of the pandemic was noted on SMEs in urban areas (compared to rural), and, accordingly, in mun.Chisinau and ATU Gagauzia (Figure11).

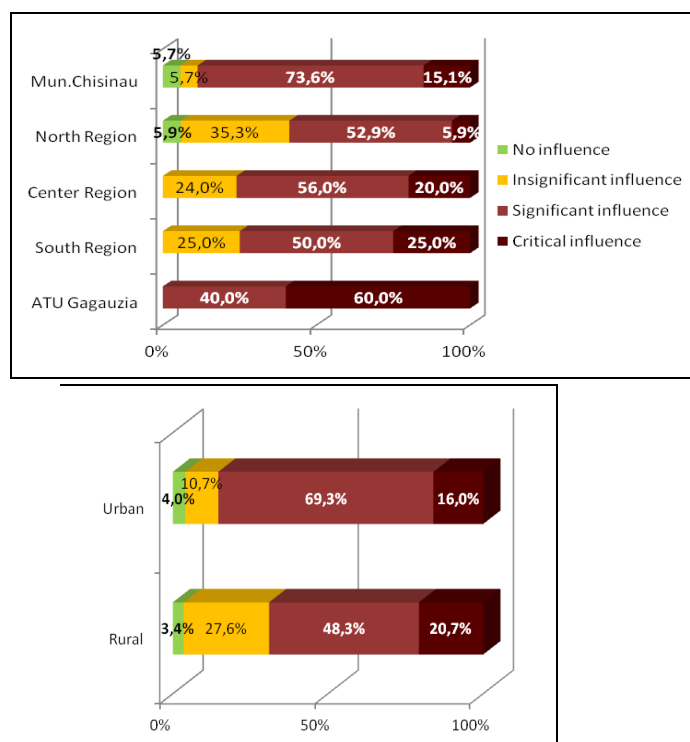


Figure 11. Impact of the Covid-19 pandemic on SMEs, depending on the location

Source: [7].

One of the questions asked to entrepreneurs in this survey was the question about the plans related to this business for the next two years. The share of entrepreneurs who plan to develop their business is significantly higher among respondents whose business was not affected by the pandemic or had an insignificant impact. At the same time, entrepreneurs who have experienced a significant or critical impact of the pandemic are more likely to have plans to close this business (Figure 12).

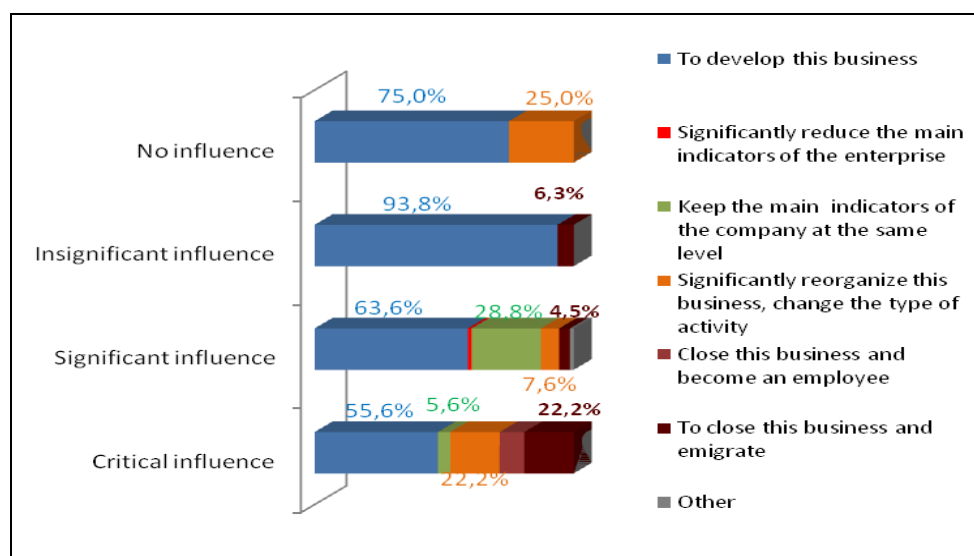


Figure 12. Business related plans for the next two years, depending on the degree of impact of the consequences of the pandemic

Source: [7].

Thus, along with the problems typical for SMEs, the consequences of the Covid-19 pandemic became a significant obstacle to business development in 2020-2021.

6. Conclusions:

Entrepreneurial ecosystem is a relatively new concept for entrepreneurship researchers in the Republic of Moldova. To assess individual components of the entrepreneurial ecosystem in Moldova, data such as information from the National Bureau of Statistics and the Agency of State Services are available; reports on the implementation of strategies and programs; results of scientific projects; international rankings.

For each of the components of the entrepreneurial ecosystem, one can identify elements for which some progress has been made, as well as elements that hinder the development of entrepreneurship in the country.

The COVID-19 pandemic and subsequent government actions to slow the spread of the epidemic have become one of the key factors that negatively affected all components of the entrepreneurial ecosystem and the performance of enterprises in 2020-2021.

A more detailed analysis of the impact of the 2020-2021 crisis on elements of the entrepreneurial ecosystem will help to develop policy recommendations for the entrepreneurship support in crisis and post-pandemic conditions.

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